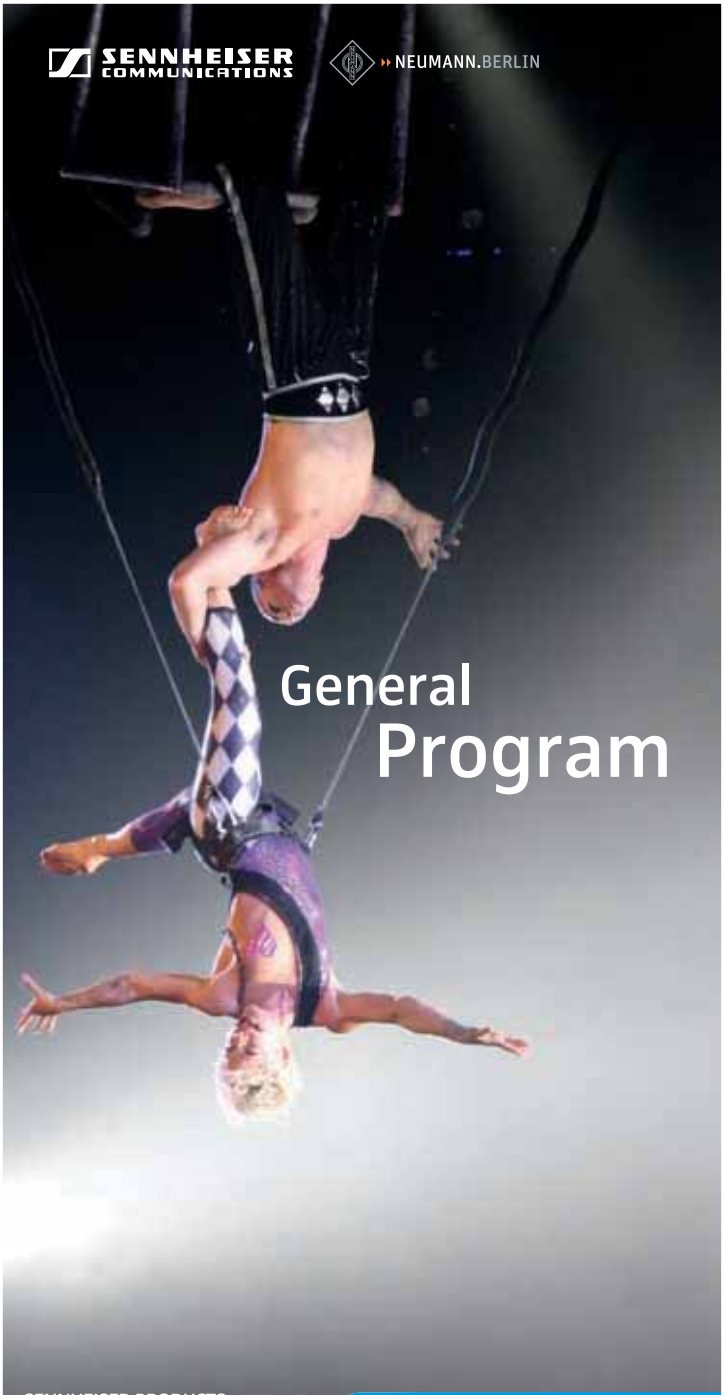
SENNHEISER COMMUNICATIONS

NEUMANN.BERLIN



General Program

SENNHEISER PRODUCTS
2010/2011

SENNHEISER

Content

INTRODUCTION 004

HEADPHONES

Audiophile sound
High-end headphones 006
Home entertainment
Wired headphones 008
Wireless headphones 010
TV headphones 012
Portable entertainment
Music 014
Sports 029
Travel 031
Professional
DJ and monitoring headphones 033
Portable in-ear monitoring 036
PC Headsets
Internet Telephony 039
Music and Entertainment 042
Gaming 044

MICROPHONES

evolution™ – The Microphone Series 048
Classic Microphones 059
Reporter's Microphones 060
Headset Microphones 061
Lavalier Microphones 063
Installed Sound 066
Optical Microphone 069
K6 Microphones 070
MKH Condenser Microphones 072
MKH 8000 Series 075

RF WIRELESS SYSTEMS

Professional Wireless Series 077
2000 Series 081
evolution wireless 084
freePORT 088

INFRARED WIRELESS SYSTEMS

Infrared Audio Distribution Systems 090
Single/Two-Channel Wideband Systems 091
Multi-Channel Systems 093

AUDIOLOGY

Assistive Listening Devices 094
Audiometric Headphones 098

AVIATION

Aviation Boomsets 099
Headsets for broadcast and communication solutions 105

INFORMATION SYSTEMS

Tourguide 2020-D Unique Guided Tour System 109
Tourguide 2020-D Stationary 112
UHF Information System 113
GuidePort 114

CONFERENCE SYSTEMS

ADN – Audio Distribution Network 117
Wireless Conference System WiCOS 119
SDC 8200 Digital Conference and Interpretation System 122

NEUMANN

Microphones 126
Large-Diaphragm Microphones 127
Tube Microphones 129
Digital Microphones 130
Vocal Microphones 134
Shotgun Microphones 135
Miniature Microphones 136
Broadcast Microphones 137
Special Microphones 138
Accessories 139

SENNHEISER COMMUNICATIONS

Unified Communications 140
Standard headsets 142

Introduction

For more than sixty years, Sennheiser has been creating superlative audio products for professionals and consumers the world over, winning countless awards and earning the accolades of critics and competitors alike. This alone is incentive enough for the Sennheiser Group, comprising the Sennheiser, Neumann and Sennheiser Communications brand names, to continue driving the development of electro-acoustics as a global market leader.

From the very beginning, our headphones and microphones have distinguished themselves. They are characterized by innovation and dedication to quality, as exemplified by the introduction of Open Aire™ technology pioneered by the HD 414 headphones in 1968. The unparalleled Orpheus headphone system offers the finest audio reproduction available, while the RS series headphones feature both exceptional quality and wireless ease. Call center employees enjoy the same benefits when they use headsets, designed entirely for their needs, by Sennheiser Communications.

Our microphones are equally impressive: the MD 421 II reissue combines the characteristics of the most popular professional dynamic mic ever (the MD 421) with enhanced frequency response. The U 87 is probably the most well-known and widely used Neumann studio microphone (with dual diaphragm capsule). Covering vocal, instrumental and backline, the evolution™ microphone series answers every conceivable live performance requirement. The latest addition to this line are the e900 series microphones, which offer the same exceptional performance and affordable prices as the other mics in this line.

Our wireless systems, whether RF or infrared, are widely recognized to be the finest wireless systems available anywhere. From the fabled 5000 series, which has won many awards – including an Emmy Award for "Outstanding Achievement in the Sciences of Television Technology for RF Wireless Systems" to our brand new evolution 300 series and wireless monitoring systems, our RF wireless line offers exceptional performance. And Sennheiser infrared wireless systems provide nearly limitless configurations, offering wireless ease and excellent sound quality for applications from personal use to conference audio. Our state-of-the-art conference systems set standards worldwide. Whether for small seminars or large international congresses –

Sennheiser offers a premier conference and interpretation solution. And our award-winning GuidePort visitor information system is the product of choice when it comes to providing quality audio for theme parks and exhibitions.

Audiology products by Sennheiser exhibit the same excellent audio specifications as their music-oriented counterparts, providing assistive listening for many varied applications, from TV and theater listening to ambient sound amplification. A recent addition to our audiology line, the Sennheiser Soundfield system combats poor acoustics in classrooms and thus improves academic performance.

Our complete line of aviation boomsets and headsets has become the industry standard for discerning pilots, crew members, and passengers alike. Enhanced by our NoiseGard™ active noise compensation system, built-in passive noise cancellation, high-quality noise compensating microphones and unrivaled comfort, these products also share traditional Sennheiser audio quality – as do our boomsets and headphones for automotive applications.

This catalog listing the entire product range of the Sennheiser Group offers you more than just leading audio products. The following pages also document standards that apply all over the world.

Prof. Dr.
Jörg Sennheiser

Audiophile sound.
High-end headphones.

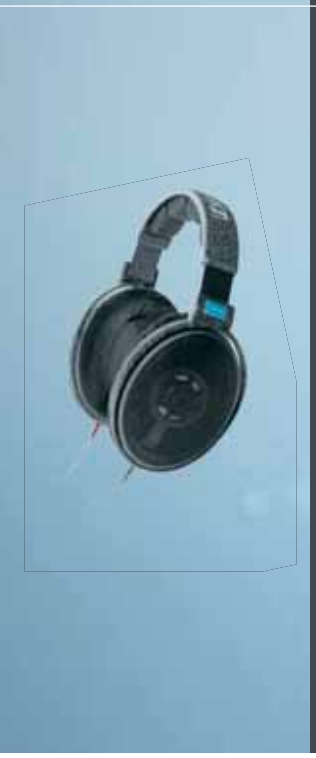
The true-to-life, unadulterated sound of the audiophile headphones will transport you into another world. You will feel as if you were in the middle of a concert hall. Lean back and enjoy.

HD 800 The HD 800 are handmade top-class headphones that set new standards. Their pure, spatial sound cannot be beaten in terms of detail and natural tones.

- Large, circular transducers
- Frequency response: 6–51,000 Hz
- Max. SPL (at 1 kHz): 102 dB
- Award:
  EISA Award 2009

HD 650 With their hand-selected and highly optimised magnet systems for each pair, these open, dynamic hi-fi headphones belong to the premium top class.

- Extremely detailed playback with high pulse fidelity
- Frequency response: 10–39,500 Hz
- Max. SPL (at 1 kHz): 103 dB
- Awards:
  Golden Ear (Audio 2009, 2006, 2005)
  Five of five possible stars
  (WHAT HI-FI 02/2004)
  Sound: First class, Price/performance:
  Outstanding (Stereoplay 05/2003)
  Test verdict: Very good, best buy
  (HOME electronic 11/2003)
  Price/performance: Very good
  (STEREO 12/2003)



HD 600 You will experience a particularly detailed sound with these open, dynamic hi-fi headphones. The powerfully reduced total harmonic distortion (THD) assures an extremely pure sound.

- Natural spatial sound
- Frequency response: 12–39,000 Hz
- Max. SPL (at 1 kHz): 97 dB
- Awards:
  Golden Ear (Audio 1998, 1999, 2000, 2001)
  1st prize, readers' choice 2000 (Stereoplay)
  Test winner (VIDEO 08/2002)

Home entertainment.
Wired headphones.

The wired stereo headphones allow you to experience your favourite music with greater intensity than ever before. And a lot more comfortably, too: padded headbands and soft ear pads assure excellent comfort.

HD 598 E.A.R. technology and compressed cellulose fleece bring sound enjoyment to the next level while a high-quality leatherette headband and velour ear pads provide outstanding comfort and luxury.

- High quality components for outstanding acoustic performance
- Special diaphragm geometry reduces intermodulation distortion
- Eargonomic Acoustic Refinement (E.A.R.) feature enables ideal sound channelling

NEW

NEW

HD 558 Get the full movie and music experience with a Surround Reflector that generates an extended spatial sound field for enhanced audio.

- Eargonomic Acoustic Refinement (E.A.R.) feature enables ideal sound channelling
- State-of-the-art Duofol diaphragms
- Velour ear pads for superior wearing comfort

NEW

HD 518 Sennheiser's innovative E.A.R. technology, special Duofol diaphragms, and generously padded ear pads bring comfort and quality together.

- Eargonomic Acoustic Refinement (E.A.R.) feature enables ideal sound channelling
- State-of-the-art Duofol diaphragms
- Outstanding comfort for long listening sessions

Home entertainment.
Wireless headphones.

Anyone who wishes to enjoy their freedom, without foregoing intensive sounds, will find Sennheiser's digital and analogue wireless headphone systems the ideal solution. Long battery life, up to 100 m reception and outstanding playback are the features of these headphones.

RS 180 These open wireless headphones with digital transmission technology provide an extremely detailed, pure sound.

- Headphone operating time: approx. 24 hours
- Frequency response: 18–21,000 Hz
- Transmission frequencies: 2.4 GHz
- Awards:
  CES Innovations Award 2010
  iF Product Design Award 2010

RS 170 The RS 170 are closed, digital wireless transmission headphones, distinguished by their powerful and detailed 3-D cinema surround sound.

- Headphone operating time: approx. 24 hours
- Frequency response: 18–21,000 Hz
- Transmission frequencies: 2.4 GHz
- Awards:
  CES Innovations Award 2010
  iF Product Design Award 2010
  reddot design award winner 2010

RS 160 These closed, digital wireless transmission headphones provide high-volume, bass-driven sound. The compact transmitter fits into any bag.

- Headphone operating time: approx. 24 hours
- Frequency response: 18–21,000 Hz
- Transmission frequencies: 22.4 GHz

RS 120 The analogue transmission wireless stereo headphone system RS 120 consists of open headphones that deliver a transparent and balanced sound as well as a transmitter.

- Headphone operating time: approx. 20-25 hours
- Frequency response: 22–19,500 Hz
- Transmission frequencies: 863.0–865.0 MHz
- Award:
  reddot design award winner 2004

RS 110 These open, analogue wireless headphones offer the perfect entry to experiencing wireless sound.
Rich bass included.

- Headphone operating time: approx. 20–25 hours
- Frequency response: 22–19,500 Hz
- Transmission frequencies: 863.0–865.0 MHz

Home entertainment.
TV headphones.

Undisturbed television enjoyment – not a problem with the TV sound systems. You can set your personal preferred volume on the headphones or the cable and freely move around your living room, without worrying about disturbing anyone else.

RS 4200 TV The RS 4200 TV's ultra-light stereo stethoset phones receive their transmitter's sound signals within a radius of 100 m.

- Headphone operating time: up to 9 hours
- Frequency response: 50–16,000 Hz
- Max. SPL (at 1 kHz): 125 dB

IS 410 TV This infrared stethoset system transmits excellent TV stereo sound within a room. Its attractive eye-catching design provides a convincing argument.

- Headphone operating time: up to 16 hours
- Frequency response: 50–16,000 Hz
- Max. SPL (at 1 kHz): 102 dB
- Award:
  iF product design award 2007

Set 50 TV The Set 50 TV is the solid entry-level model in the infrared stethoset systems range. It offers you great mobility and high Sennheiser quality at a low price.

- Headphone operating time: up to 9 hours
- Frequency response: 50–12,000 Hz
- Max. SPL (at 1 kHz): 120 dB

HD 62 TV The strength of these closed stereo headphones lies, aside from their comfort, in their strong shielding from ambient noise.

- Extra-long connection cable: 6 m
- Frequency response: 25–20,000 Hz
- Max. SPL (at 1 kHz): 115 dB

HD 30 TV The HD 30 TV are elegant, open stereo headphones for long TV evenings. Their extra-light construction makes them extremely comfortable.

- Extra-long connection cable: 6.2 m
- Frequency response: 30–20,000 Hz
- Max. SPL (at 1 kHz): 115 dB

Portable entertainment.
Music.

A dynamic, balanced sound and their varied range of applications distinguish these classic, portable headphones and earphones. The designs are equally varied. Take your pick.

OMX 980 The OMX 980 are top-class portable hi-fi clip-on earphones. Their reinforced, elegant design provides an extremely comfortable and secure fit.

- Neodymium magnets for a powerful, precise sound
- Integrated volume control
- Frequency response 16–23,000 Hz
- Max. SPL (at 1 kHz): 120 dB

MX 980 These high-quality hi-fi earphones provide balanced, detailed sound on the move. A carrying case is included.

- Neodymium magnets for a powerful, precise sound
- Integrated volume control
- Frequency response: 16–23,000 Hz
- Max. SPL (at 1 kHz): 120 dB

CX 980 The neodymium magnets of these ear-canal phones assure a natural, balanced sound. A broad range of exchangeable ear adaptors additionally enables custom sound tuning.

- Patented airline adaptor
- Integrated volume control
- Frequency response: 16–24,000 Hz
- Max. SPL (at 1 kHz): 115 dB

MX W1 The classy MX W1 are portable and completely wireless stereo ear-canal phones. The carrying case includes a battery charging function.

- Headphone operating time: approx. 3–4 hours
- Frequency response: 19–20,000 Hz
- Max. SPL (at 1 kHz): 115 dB
- Awards:
  Editor´s choice award, Popular mechanics, EISA Award 2008 European Headphones 2008-2009

CX 880 / CX 880i These ear-canal phones have a high degree of shielding from exterior noise to allow you to enjoy a detailed, natural stereo sound.

- Exchangeable ear-canal adaptors for a comfortable fit
- Integrated volume control
- Frequency response: 17–23,000 Hz
- Max. SPL (at 1 kHz): 115 dB

The CX 880i comes with a smart in-line remote control with microphone for iPod, iPhone and iPad.*

CX 870 These premium ear-canal phones have powerful passive noise attenuation. This enables the precise, bass-driven stereo sound to come into its own.

- Exchangeable ear-canal adaptors for a comfortable fit
- Frequency response: 17–22,500 Hz
- Max. SPL (at 1 kHz): 115 dB

OCX 880 These ear-canal phones with flexible bands fit especially securely and comfortably on and in the ear. They deliver precise and clear stereo sound.

- Exchangeable ear adaptors and a practical carrying case
- Integrated volume control
- Frequency response: 19–21,000 Hz
- Max. SPL (at 1 kHz): 108 dB

MX 880 The MX 880 are in-ear phones that impress through their precise, dynamic stereo sound and whose ergonomic design make even long periods of use a pleasure.

- Integrated volume control
- Frequency response: 18–22,000 Hz
- Max. SPL (at 1 kHz): 120 dB

NEW

PX 360 BT The high-end collapsible Bluetooth® stereo headphones offering an outstanding wireless listening pleasure. The PX 360 BT are also equipped with SRS surround sound mode, providing you with a listening option of an immersive virtual surround soundscape.

- Collapsible, metal-reinforced headband ensures portability and durability
- Integrated track and volume controls for enhanced usability and convenience
- Frequency response: 15–22,000 Hz
- Max. SPL (at 1 kHz): 107 dB

NEW

PX 360 Great sound with a timeless design.

The PX 360 headphones offer an excellent sound reproduction while their closed, circumaural design effectively blocks out ambient noise.

- Collapsible, metal-reinforced headband ensures portability and durability
- Frequency response: 15–22,000 Hz
- Max. SPL (at 1 kHz): 110 dB

The MM 400 has an integrated microphone for making calls with Bluetooth® mobile phones.

PX 210 BT / MM 400 These wireless mini-headphones enable superior listening pleasure with full freedom of movement. The foldable design allows simple transport.

- Wireless transmission using Bluetooth® 2.1
- Frequency response: 15–22,000 Hz
- Max. SPL (at 1 kHz): 107 dB

The MM 70i comes with a smart in-line remote control with microphone for iPod, iPhone and iPad.*

NEW

CX 400-II / MM 70i With superior musical detail resolution and precise dynamics, the ear-canal phones target music aficionados wanting to upgrade their portable audio devices.

- Frequency response: 17–22,000 Hz
- Max. SPL (at 1 kHz): 114 dB

The MM 100 has an integrated microphone for making calls with Bluetooth® mobile phones.

MM 100 The MM 100 Bluetooth® stereo headset lets you enjoy music and never miss a call all from your mobile phone without getting tangled up in a cord.

- Perfect for street and sports
- Frequency response: 22–20,000 Hz
- Award: iF Product Design Award 2010

MM 50 for iPhone Delivering pro-quality stereo sound, the MM 50 iPhone maximises your listening enjoyment with an iPhone, iPod and even the latest MacBooks.

- Also available as MM 50 for Nokia – tailor-made for Nokia mobile phones with a 3.5mm stereo socket
- Frequency response: 18–22,000Hz

The PX 200-IIi comes with a smart in-line remote control with microphone for iPod, iPhone and iPad.*

NEW

PX 200-II / PX 200-IIi

The leatherette ear pads and one-sided cable make the foldable PX 200-II an extremely comfortable companion.

- Frequency response: 10–21,000 Hz
- Max. SPL (at 1 kHz): 115 dB

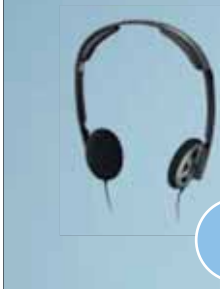
The PX 100-IIi comes with a smart in-line remote control with microphone for iPod, iPhone and iPad.*

NEW

PX 100-II / PX 100-IIi

The supra-aural PX 100-II features natural sound reproduction with powerful bass. Simply fold up for easy transport.

- Mini-headphones with open construction
- Frequency response: 15–27,000 Hz
- Max. SPL (at 1 kHz): 114 dB



MM 60 for iPhone

The MM 60 iPhone gives you a brilliant music experience. The detachable cable makes the foldable headset very convenient: you just need to change the cable when using a new mobile phone.

- Also available as MM 60 for Nokia – tailor-made for Nokia mobile phones with a 3.5mm stereo socket
- Frequency response: 15 – 27,000Hz

NEW

PX 90

Enjoy hours of strong bass in comfort thanks to the sleek steel headband that is not only durable, but also highly flexible.

- Dynamic drivers for stereo sound with powerful bass
- Sleek steel headband for flexibility and durability
- Optimised for portable music players

PX 40

With their volume control integrated into the cable, these open, dynamic stereo headphones are the perfect companion while on the move.

- Bass tube for rich bass sounds
- Frequency response: 20–20,000 Hz
- Max. SPL (at 1 kHz): 115 dB

PX 30 The PX 30 are open, dynamic mini-headphones that, due to the bass tube and particularly light membrane, deliver a balanced sound.

- Bass tube for rich bass sounds
- Frequency response: 30–20,000 Hz
- Max. SPL (at 1 kHz): 115 dB

PX 20 These mini-headphones are extremely light and comfortable to wear. They reproduce thumping basses and high trebles.

- Open, dynamic mini-headphones
- Frequency response: 50–18,500 Hz
- Max. SPL (at 1kHz): 110 dB

The HD 238i comes with a smart in-line remote control with microphone for iPod, iPhone and iPad.*

NEW

HD 238 Precision / HD 238i

In concert with high-quality neodymium components, the outstand-ing acoustic system of the HD 238 enables the natural sound to come into its own.

- Open, supra-aural construction
- Frequency response: 16–23,000 Hz
- Max. SPL (at 1 kHz): 114 dB
- Awards (HD 238 Precision): reddot design award winner 2010

HD 228 The closed supra-aural HD 228 doesn't only excel with their excellent bass reproduction, but also with their stylish white or elegant black colour.

- Neodymium magnets for a bass-driven sound
- Frequency response: 18–22,000 Hz
- Max. SPL (at 1 kHz): 110 dB

The HD 218i comes with a smart in-line remote control with microphone for iPod, iPhone and iPad.*

NEW

HD 218 / HD 218i

The HD 218 are closed supra-aural headphones with an attractive design. Thumping bass sounds truly come into their own.

- Neodymium magnets for a bass-driven sound
- Frequency response: 19–21,000 Hz
- Max. SPL (at 1 kHz): 108 dB

CX 300-II

These ear-canal phones provide precise and clear stereo sounds with great vitality. They are available in various colours and with a 2.5-mm jack.

- Ideal fit for every ear
- Frequency response: 19–20,000 Hz
- Max. SPL (at 1 kHz): 113 dB

NEW

PMX 90

An ergonomic neck band and single-sided cable provides all the comfort and convenience you need for whatever tasks you're engaged in.

- Dynamic drivers for stereo sound with powerful bass
- Sleek, ergonomic, and stylish neckband for a secure and comfortable fit
- Optimised for portable music players

PMX 60

The PMX 60 offers an excellent, balanced stereo sound, exceeding all the usual expectations from neckband headphones.

- Bass tube for rich bass sounds
- Frequency response: 18–21,000 Hz
- Max. SPL (at 1 kHz): 122 dB

PMX 40

These open, dynamic neckband headphones fit over the ears, their ergonomic design making them especially comfortable to wear.

- Innovative Basswind system
- Frequency response: 20–20,000 Hz
- Max. SPL (at 1 kHz): 116 dB

MX 580 The MX 580 not only provide a particularly clear sound on the move, the comfortable-to-wear ear sleeves and the included carrying case also provide the highest degree of comfort.

- Ergonomic design for good grip
- Integrated volume control
- Frequency response: 18–21,000 Hz
- Max. SPL (at 1 kHz): 119 dB

MX 581 These earphones are especially well suited for small ears and their ergonomic design ensures a secure and comfortable fit. They produce a crystal-clear sound.

- Adaptor for two headphone connectors
- Integrated volume control
- Frequency response: 18–21,000 Hz
- Max. SPL (at 1 kHz): 119 dB

MX 471 The MX 471's LiveBass system provides outstanding bass sounds. The compact earphones are especially ideal for users with small ears.

- Carrying bag for fourth-generation iPod nanos
- Frequency response: 18–20,000 Hz
- Max. SPL (at 1 kHz): 119 dB

MX 470 The LiveBass system enables these ergonomically shaped earphones to provide thumping bass sounds. The ear sleeves fit comfortably in the ears.

- Carrying bag for fourth-generation iPod nanos
- Frequency response: 18–20,000 Hz
- Max. SPL (at 1 kHz): 119 dB

MX 371 These in-ear phones deliver a powerful stereo sound and the ergonomic design makes them perfectly suited, even for users with small ears.

- Cable slider prevents tangles
- Frequency response: 18–20,000 Hz
- Max. SPL (at 1 kHz): 118 dB

MX 370 These light in-ear phones provide great bass reproduction and a dynamic sound on the move.

- Cable slider prevents tangles
- Frequency response: 18–20,000 Hz
- Max. SPL (at 1 kHz): 118 dB

MX 271 The MX 271 offer a dynamic sound on the move. Their ergonomic design was specially optimised for people with smaller ears.

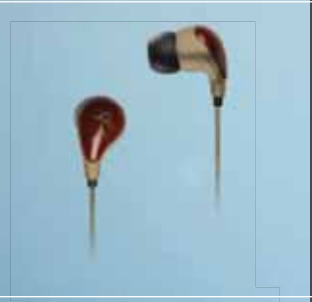
- Cable slider prevents tangles
- Frequency response: 19–20,000 Hz
- Max. SPL (at 1 kHz): 118 dB

MX 270 No sacrifice in sound quality or portability. The ergonomic MX 270 earphones deliver a powerful stereo sound experience.

- Ideal for connecting with portable media devices
- Ergonomic design for a superior fit
- Frequency response: 19–20,000 Hz
- Max. SPL (at 1 kHz): 118 dB

MXL 570 A clear, bass-driven sound and many extras: the lanyard and a loop for attaching an MP3 player make the MXL 570 a fantastic companion.

- LiveBass system
- Frequency response: 18–20,000 Hz
- Max. SPL (at 1 kHz): 119 dB



CX 281 The clear and detailed sound from these ear-canal phones is impressive. The three ear adaptors ensure an ideal fit, even for users with small ears.

- Adaptor for two headphone connectors
- Integrated volume control
- Frequency response: 19–20,500 Hz
- Max. SPL (at 1 kHz): 120 dB

CX 280 The CX 280 high-performance ear-canal phones have a particularly clear and detailed sound. A volume control unit is integrated into the cable.

- Three ear adaptors for perfect fit
- Frequency response: 19–20,500 Hz
- Max. SPL (at 1 kHz): 120 dB

CX 271 The CX 271 are ear-canal phones with extremely intensive bass reproduction. The ergonomic design is, above all, ideal for users with small ears.

- Three ear adaptors for perfect fit
- Frequency response: 19–20,000 Hz
- Max. SPL (at 1 kHz): 120 dB

CX 270 These bass-driven ear-canal phones offer three silicon attachments in various sizes to provide an ideal fit in the ear.

- Cable winder prevents tangles
- Frequency response: 19–20,000 Hz
- Max. SPL (at 1 kHz): 120 dB

CX 200 Street-II Ear-canal phones with an innovative casing that ensures extremely comfortable fit and high passive attenuation of ambient noise.

- Powerful, bass-driven stereo sound
- Frequency response: 20–20,000 Hz
- Max. SPL (at 1 kHz): 110 dB

OMX 181 The OMX 181 are especially ideal for users with small ears. The fully flexible ear bands provide an especially secure, custom fit for a bass-driven sound experience.

- With volume control on the cable
- Frequency response: 18–20,000 Hz
- Max. SPL (at 1 kHz): 118 dB

OMX 180 These earphones with fully flexible ear bands adapt to all ears and the LiveBass system provides rich, bass-driven tones.

- With volume control on the cable
- Frequency response: 18–20,000 Hz
- Max. SPL (at 1 kHz): 118 dB

NEW

MX 170 These bass-driven stereo earphones offer asymmetrical cable worm behind the neck for easy handling and comfort.

- Powerful, bass-driven stereo sound
- Frequency response: 22–20,000 Hz
- Max. SPL (at 1 kHz): 109 dB

HD 448 The closed construction of these first-class, dynamic headphones attenuates ambient noise and provides an excellent, unadulterated stereo sound.

- Ergonomic design for an ideal fit
- Frequency response: 16–24,000 Hz
- Max. SPL (at 1 kHz): 114 dB

HD 438 The strength of the dynamic, closed HD 438 headphones lies in their excellent bass reproduction. The cool design makes these headphones even more appealing.

- Neodymium magnets for powerful bass
- Frequency response: 17–22,500 Hz
- Max. SPL (at 1 kHz): 112 dB

HD 428 The HD 428 are closed headphones with great stereo playback. The robust construction and solid rubber surface ensures a firm comfortable fit.

- Neodymium magnets for powerful bass
- Frequency response: 18–22,000 Hz
- Max. SPL (at 1 kHz): 110 dB

HD 418 These circum-aural stereo headphones combine bass-driven sound with an attractive in-mould design.

- Passive attenuation of ambient noise
- Frequency response: 20–20,000 Hz
- Max. SPL (at 1 kHz): 108 dB

HD 408 The HD 408 are open supra-aural headphones with a bass-driven stereo sound. The extremely light, flexible headband
pro-vides the highest wearing comfort.

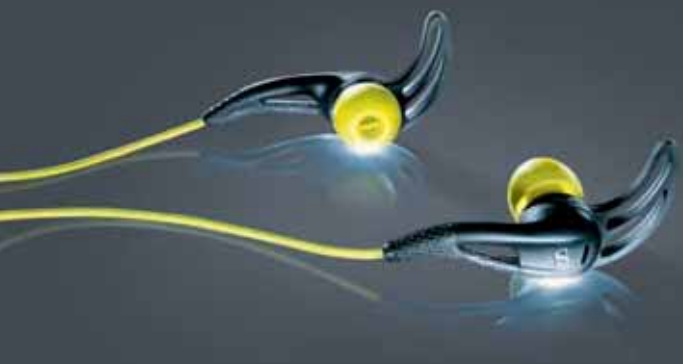
- Ultra-light construction
- Frequency response: 25–21,000 Hz
- Max. SPL (at 1 kHz): 114 dB

HD 201 The entry-level model for a sophisticated sound experience brings out its bass-driven sound through passive attenuation.

- Closed construction
- Frequency response: 21–18,000 Hz
- Max. SPL (at 1 kHz): 108 dB
- Award:
  iF Product Design Award 2005

Portable entertainment. Sports.

The innovative design of Sennheiser/adidas sports line offers, besides outstanding sound, the most comfortable and secure fit when jogging or in the gym. All headphones are made of a high-quality special sweat- and water-resistant materials.



The CX 680i comes with an integrated microphone and is compatible with iPhone, iPod, and iPad.*

CX 680 Sports / CX 680i These ear-canal phones are ideal for an excellent sound experience during sports. High-output ear-canal drivers provide energising sound with superb noise isolation.

- Three ear-adaptor sizes for an ideal fit
- Integrated volume control
- Frequency response: 18–20,000 Hz
- Max. SPL (at 1 kHz): 120 dB

The MX 680i comes with an integrated microphone and is compatible with iPhone, iPod, and iPad.*

MX 680 Sports / MX 680i

The MX 680 comes with the innovative earfins that helps secure the earphones to the ears. It is ideal for those who wants to enjoy their rhythm even during active workout.

- Earfins ensure your earphone stays in place
- Integrated volume control
- Frequency response: 18–20,000 Hz
- Max. SPL (at 1 kHz): 118 dB

The PMX 680i comes with an integrated microphone and is compatible with iPhone, iPod, and iPad.*

PMX 680 Sports / PMX 680i

The PMX 680's neckband combines a secure and comfortable fit during workouts.

- Integrated volume control
- Frequency response: 18–20,000 Hz
- Max. SPL (at 1 kHz): 120 dB

The OMX 680i comes with an integrated microphone and is compatible with iPhone, iPod, and iPad.*

OMX 680 Sports / OMX 680i

These ergonomically shaped clip-on headphones have an extremely secure fit. Even during sudden movement of the head, they offer uninterrupted enjoyment of music.

- Different ear-adaptor sizes for an ideal fit
- Integrated volume control
- Frequency response: 18–20,000 Hz
- Max. SPL (at 1 kHz): 118 dB

Portable entertainment. Travel.

First-class travel – the headphones of the Sennheiser Travel line belong in this league. The active NoiseGard™ system effectively attenuates ambient noise, allowing you to concentrate fully on the excellent stereo sound.

PXC 450 The PXC 450 are circum-aural, foldable, high-end travel headphones. The NoiseGard™ 2.0 function suppresses exterior noise, bringing the detailed sound to the fore.

- NoiseGard™ 2.0 and TalkThrough function
- Frequency response: 8–28,000 Hz
- Max. SPL (at 1 kHz): 108 dB
- Awards:
  Golden Ear (Audio 2008 and 2009)
  Plus X Award 2008, What Hi-Fi Award 2007
  iF Product Design Award 2007

The MM 550 TRAVEL has an integrated microphone for making calls with Bluetooth® mobile phones.

NEW

PXC 360 BT / MM 550 TRAVEL

An excellent travel headphones with SRS surround sound mode, providing you with a listening option of an immersive virtual surround soundscape.

- NoiseGard™ 2.0 and TalkThrough function
- Frequency response: 15–22,000 Hz

The MM 450 TRAVEL has an integrated microphone for making calls with Bluetooth® mobile phones.

PXC 310 BT / MM 450 TRAVEL

The folding PXC 310 Bluetooth is the ideal travelling companion for anyone who wishes to enjoy wireless high-quality sound in loud environments.

- NoiseGard™ 2.0 and TalkThrough function
- Frequency response: 15–22,000 Hz
- Max. SPL (at 1 kHz): 107 dB

PXC 310 The PXC 310 are the perfect mini-headphones for noisy environments like aeroplanes or trains. They are easy to fold up and comfortable to wear.

- NoiseGard™ 2.0 and TalkThrough function
- Frequency response: 15–22,000 Hz
- Max. SPL (at 1 kHz): 107 dB

PXC 250-II These closed stereo mini-headphones are foldable and easy to carry. Additionally, the steel-reinforced headband is extremely durable and robust.

- NoiseGard™ technology
- Frequency response: 10–21,000 Hz
- Max. (SPL) (at 1 kHz): 112 dB

The MM 80i TRAVEL comes with a smart in-line remote control with microphone for iPod, iPhone and iPad.*

NEW

CX 6 / MM 80i TRAVEL

The high-end ear-canal phones with passive noise attenuation were specially developed for frequent travellers.

- Frequency response: 10–18,000 Hz
- Max. SPL (at 1 kHz): 115 dB

Professional.
DJ and monitoring headphones.

Sennheiser's Professional headphones provide effective shielding from all ambient noise and outstanding monitoring characteristics. They are extremely robust and resilient – perfect for clubs and studios.

HD 380 pro The foldable high-end headphones are ideal for professional use in a studio. The closed construction ensures excellent attenuation; the E.A.R. technology provides a perfectly channelled sound.

- With carrying bag
- Frequency response: 8–27,000 Hz
- Max. SPL (at 1 kHz): 110 dB

HD 280 Silver The HD 280 Silver are dynamic headphones with a closed construction, which provide – besides a comfortable fit – a linear, natural sound.

- Easily exchangeable components
- Frequency response: 8–25,000 Hz
- Max. SPL (at 1 kHz): 110 dB

HD 280 professional Because of the robust construction and excellent shielding, the HD 280 Professional headphones are ideal for listening in noisy environments.

- True-to-detail linear reproduction
- Frequency response: 8–25,000 Hz
- Max. SPL (at 1 kHz): 102 dB

HD 25-II Based on their low weight and the option of one-ear listening, the HD 25 II headphones are indispensable for mobile monitoring. The true sound professional's working headphones.

- Split headband
- Frequency response: 16–22,000 Hz
- Max. SPL (at 1 kHz): 120 dB

HD 25 SP-II The HD 25 SP II are closed, dynamic headphones. They are extremely comfortable, making them outstanding for nightly DJ use.

- Exchangeable OFC cable
- Frequency response: 30–16,000 Hz
- Max. SPL (at 1 kHz): 114 dB

HD 215 These closed headphones provide DJs and sound engineers with outstanding shielding from exterior noise, rich stereo sound, and are simultaneously extremely comfortable to wear.

- Robust, rotatable earpieces
- Frequency response: 12–22,000 Hz
- Max. SPL (at 1 kHz): 112 dB

HD 205 The elegant HD 205 are medium-sized, supra-aural headphones with outstanding sound characteristics and great attenuation.

- Rotatable earpiece for DJ use
- Frequency response: 14–20,000 Hz
- Max. SPL (at 1 kHz): 112 dB
- Award:
  reddot design award winner 2006

HD 203 Due to their high sound pressure level and reliable shielding, these closed hi-fi stereo headphones are particularly ideal for work at the mixing desk.

- Punchy bass and precise trebles
- Frequency response: 18–18,000 Hz
- Max. SPL (at 1 kHz): 115 dB

Professional.
Portable in-ear monitoring.

These practically indestructible and robust earphones were specially developed for in-ear monitoring on stage. They provide artists and sound technicians with an outstanding, detailed stereo sound.

The IE 8i comes with a smart in-line remote control with microphone for iPod, iPhone and iPad.*

IE 8 / IE 8i The IE 8 are hi-fi ear-canal phones whose cable is worn from behind the ear. They provide outstanding precision and clarity, as well as manual frequency control.

- High noise attenuation of up to 26 dB
- Frequency response: 10–20,000 Hz
- Max. SPL (at 1 kHz): 125 dB
- Award:
  Golden Ear (Audio 2009)

NEW

IE 7 These ear-canal phones provide an extremely precise sound for in-ear monitoring. The broad range of earpieces ensures a comfortable and secure fit in the ear.

- Excellent shielding from outside noise
- Frequency response: 10–19,000 Hz
- Max. SPL (at 1 kHz): 120 dB
- Award:
  iF Product Design Award 2005

IE 6 The IE 6 in-ear monitoring model features strong attenuation of ambient noise and true-to-detail, high-bass stereo sound.

- Broad range of accessories
- Frequency response: 10–18,000 Hz
- Max. SPL (at 1 kHz): 115 dB
- Award:
  International Design Excellence Award 2008

EZX 60 The stylish EZX 60 Bluetooth® headset is the wire-free answer to making easy phone calls with superb sound quality while on the go. Whether you're talking with business partners or friends on busy streets, Sennheiser Communications' digital noise and echo cancellation technologies ensure every word of your conversation comes through clear and sharp.

- Easy phone calls with superb sound quality
- Frequency response: 300–3,400 Hz
- Max. SPL (at 1 kHz): 110 dB

Bluetooth

VMX 100 The VMX 100 is a premium Bluetooth® headset for mobile phones. It incorporates VoiceMax™ technology to keep your voice crystal clear and easy to understand on the other end of the phone. Featuring wireless Bluetooth® 2.0, the VMX 100 is compatible with all Bluetooth® mobile phones.

- Automatic power off/on when closed/open
- Frequency response: 100–8,000 Hz
- Max. SPL (at 1 kHz): 104 dB

Bluetooth

PC Headsets.
Internet Telephony.

Your voice is being transferred with a crystal-clear sound while using internet telephony. Say hello to internet telephony and goodbye to expensive phone bills.

Mac

PC 36 USB The next-generation PC 36 USB headset gives the user an in-line volume/mute control and integrated soundcard – for internet calls, music and movies with Sennheiser sound guaranteed.

- Stereo USB headset with volume control
- Frequency response: 40–18,000 Hz
- Max. SPL (at 1 kHz): 109dB

PC 26 USB The next-generation PC 26 USB internet telephony headset combines single-sided comfort with an in-line volume/ mute control and integrated soundcard for Sennheiser sound quality with every call.

- Single-sided USB headset with volume control
- Frequency response: 40–18,000 Hz
- Max. SPL (at 1 kHz): 109 dB

Mac

PC 31 The PC 31 stereo headset is ideal for internet communication/VoIP and listening to music. It is easy to use and delivers excellent voice clarity thanks to its noise-canceling microphone.

- Stereo lightweight headset
- Frequency response: 40–18,000 Hz
- Max. SPL (at 1 kHz): 109 dB
- Awards:
  iF Product Design Award 2010
  reddot design award winner 2010

PC 21 The single-sided PC 21 is perfect for all kind of internet communication/ VoIP. It is easy to use and delivers excellent voice clarity thanks to its noise-canceling microphone.

- Single-sided lightweight headset
- Frequency response: 40–18,000 Hz
- Max. SPL (at 1 kHz): 109 dB

PC 11 The PC 11 Internet Telephony headset makes it easy to phone over the net thanks to one-hand operation – while the ultra-light on-ear design is stylishly discreet.

- Single-sided on-ear headset
- Frequency response: 45–18,000 Hz
- Max. SPL (at 1 kHz): 113 dB

PC 100 The PC 100 is the ideal all-in-one Headset 2 Go – combining an ultra-light in-ear design with excellent sound quality for enjoying internet telephony, entertainment and gaming.

- Stereo in-ear headset
- Frequency response: 22–20,000 Hz
- Max. SPL (at 1 kHz): 109 dB

PC 121 In ultra-light design, the PC 121 is just the right one to phone via internet while travelling, working or when at home. The in-ear headset does not need much space, neither in your bagage nor on your desk.

- Single-sided in-ear wearing style
- Frequency response: 50–15,000 Hz
- Max. SPL (at 1 kHz): 114 dB

PC Headsets.
Music and Entertainment.

Listen to music, watch movies and use any internet application – with our headsets you can enjoy all in superb Sennheiser stereo.

PC 230 The multimedia headset with cutting-edge stereo sound and added comfort for pristine telephony and an inspirational entertainment experience. Automatic microphone mute, left/right reversibility and on-ear cup volume control put the PC 230 in a comfort class of its own.

- Intuitive design and automatic microphone mute
- Frequency response: 18–22,000 Hz
- Max. SPL (at 1 kHz): 113 dB
- Award: reddot design award winner 2010

PC 146 USB Thanks to its superb stereo sound, the PC 146 USB is perfect for enjoying music and movies as it is for making calls on the internet. It features a detachable USB adapter with an integrated soundcard giving you that great Sennheiser stereo experience. Its neckband design delivers outstanding comfort – in style.

- Neckband design with USB soundcard
- Frequency response: 40–20,000 Hz
- Max. SPL (at 1 kHz): 109 dB

Mac

PC 141 Thanks to its superb stereo sound, the PC 141 is just as great for enjoying music and movies as it is for making calls on the internet. Its stylish neckband makes it an extremely comfortable piece of kit.

- Comfortable neckband
- Frequency response: 40–20,000 Hz
- Max. SPL (at 1 kHz): 109 dB

PC 131 Thanks to superb stereo sound, the PC 131 is the ideal headset for enjoying music, movies and internet communication. It is lightweight and comfortable to wear all day long.

- Comfortable lightweight headband
- Frequency response: 30–18,000 Hz
- Max. SPL (at 1 kHz): 112 dB

PC Headsets.
Gaming.

We develop our gaming headsets in close cooperation with pro gamers and that's why we know exactly what you – as a gamer – need. They all deliver great stereo sound.

PC 360 Developed together with the eSports team mTw, the PC 360 headset features an open design that delivers state-of-the-art Sennheiser audio and a natural listening experience – while keeping the head cool. Long gaming sessions are also no problem thanks to the headset's comfortable XXL ear cups with intuitive design.

- Professional gaming headset with open acoustic design
- Frequency response: 15–28,000 Hz
- Max. SPL (at 1 kHz): 112 dB
- Award:
  reddot design award winner 2010

PC 350 The circumaural, closed type headset shuts out disturbing noises from your environment. The special shaping of the frequency response is optimized for binaural perception, improving your ability to detect where a sound comes from. Sound perception is so precise you literally feel you're in the game.

- Professional collapsible gaming headset with closed acoustic design
- Frequency response: 10–26,000 Hz
- Max. SPL (at 1 kHz): 108 dB
- Awards:
  iF Product Design Award 2008

PC 330 The PC 330 brings gamers intuitive design – and the competitive edge. Closed acoustics keep gamers focused on the game, but with a swivel of the DJ Hinge ear cup, they can talk directly with their teammates. Ready for a break? Mute the microphone by raising the boom and relax to music or videos in great Sennheiser sound.

- Dj Hindge for direct communication
- Frequency response: 14–22,000 Hz
- Max. SPL (at 1 kHz): 112 dB
- Award:
  reddot design award winner 2010

PC 333D The PC 333D headset tears up the script for professional 3D gaming. Its hyper-realistic, multichannel soundscape and ear-hugging closed-acoustic design take even the most raucous LAN party to a whole new level of intensity.

- Closed acoustic design powered by Dolby Headphone for 5.1/7.1 surround sound
- Frequency response: 14–22,000 Hz
- Max. SPL (at 1 kHz): 112 dB

NEW

PC 163D The PC 163D uses state-of-the-art Sennheiser audio and virtualization technology from Dolby* Headphone to create 7.1 channel surround with detail and depth. It was developed together with the eSport team mTw and it has a noise canceling microphone with adjustable boom and integrated volume control.

- Open acoustic design
- Frequency response: 15–23,000 Hz
- Max. SPL (at 1 kHz): 114 dB

NEW

PC 300 G4ME The perfect choice for the gamer who likes to travel: the PC 300 G4ME is a lightweight, in-ear headset. Thanks to three ear sleeve sizes, the PC 300 is comfortable to wear and delivers the full Sennheiser audio experience without any distracting background noise.

- Extremly portable in-ear headset
- Frequency response: 18–22,000 Hz
- Max. SPL (at 1 kHz): 106 dB

PC 161 The PC 161 is a headset for serious online match play, competition or LAN parties. It uses the open-speaker system to deliver true-to-life sound for superior gaming performance XL ear cups with velour pads provides maximum comfort.

- XL veolur ear pads with open acoustic design
- Frequency response: 15–23,000 Hz
- Max. SPL (at 1 kHz): 114 dB

PC 151 The PC 151 features an adjustable, ultra-comfort headband, in-line volume control, microphone mute switch and extra large velour ear cup pads that block out ambient noise – just the right features for intensive gaming.

- Open acoustic design
- Frequency response: 30–18,000 Hz
- Max. SPL (at 1 kHz): 112 dB

What do the product names stand for?

CX Ear-canal headphones
eH Evolution headphones
HD Headphones, dynamic
IE In-ear monitoring
IS Infrared system
MX In-ear phones
MXL In-ear phones with lanyard
OMX Clip-on headphones
PMX Neckband headphones
PX Mini-headphones with headband
PXC Headphones with noise-cancelling function (NoiseGard™)
RS Radio system

Microphones.
evolution – The Microphone Series.

The evolution™ Series presents a complete range of microphones covering vocal, instrument and backline. Evolution microphones feature road-proof construction, full-metal body, minimum handling noise, amazing SPL and outstanding feedback rejection.

e965 A hand-held vocal microphone with a true condenser capsule in large-diaphragm technology. It combines the best available features of a stage microphone with Sennheisers pioneering experience in the field of acoustics. Able to cut through high on-stage levels the e965 is the top model of the award-winning evolution 900 Series.

Switchable pick-up pattern (cardiod/ super-cardiod)

- Frequency response: 40–20,000 Hz
- Nominal impedance: 50 Ω

evolution 900 Series

e935 A cardioid vocal microphone developed to cut through high stage levels. Highly insensitive to feedback and handling noise, the e935's durable design will take all the inevitable knocks on stage. A hum compensating coil reduces electromagnetic interference.

- Frequency response: 40–18,000 Hz
- Nominal impedance: 350 Ω

e945 A top-class super-cardioid vocal microphone for professional use. The e945 easily cuts through the mix and provides exceptional presence. Precise, full sound is matched with high insensitivity to feedback and handling noise. Rugged design with shock-mount capsule and hum compensating coil.

- Frequency response: 40–18,000 Hz
- Nominal impedance: 350 Ω

e901 A "semi"-cardioid condenser boundary microphone, ideal for miking kick drums. It features an integral phantom power adapter and a highly robust, step-resistant housing.

- Frequency response: 20–20,000 Hz
- Nominal impedance: < 100 Ω

e902 The frequency response of the e902 has been optimized for very low frequencies, making this cardioid dynamic microphone an ideal choice for kick drums, bass guitar amps, tuba and other low-frequency instruments. Very fast attack.

- Frequency response: 20–18,000 Hz
- Nominal impedance: 350 Ω

e904 A cardioid dynamic microphone for drums (especially toms and snare drums) and percussion. Its very compact design allows a positioning very close to the drum skin. With clip for attaching to the drum rim.

- Frequency response: 40–18,000 Hz
- Nominal impedance: 350 Ω

e905 With a high maximum SPL and fast transient response, the cardioid, dynamic e905 is an all-rounder suitable for a wide range of instruments, and an ideal choice for the snare drum, where the short mic body allows it to be positioned close to the drum skin.

- Frequency response: 40–18,000 Hz
- Nominal impedance: 350 Ω

e906 The super-cardioid e906 is designed specially for guitar amps but is also excellent for drums, percussion and brass instruments. It features three adjustable sound characteristics (bright, normal, smooth).

- Frequency response: 40–18,000 Hz
- Nominal impedance: 350 Ω

e908 The four versions of this cardioid condenser microphone guarantee optimum miking solutions and exceptionally vivid, clear sound.
The e908 B is designed for brass instruments, but its multifunctional bell clip also makes it particularly suitable for drums with suspension system or congas. Complete with phantom power adapter.
The e908 B ew (without phantom power adapter) has been specially designed for wireless miking of saxophones, and is used in combination with an evolution wireless bodypack transmitter (not included).
The same applies to the e908 T ew, which is the ideal solution for miking trumpets, flugelhorns and trombones.
The e908 D has been specially developed for drums and percussion. It includes a multi-functional drum clip with integral shock absorber and an intelligent MZA 900 P (see page 49) phantom power adapter with an LED for cable, phantom power and level check. MZA 900 P/MZA 900 P-4 also available separately.

- Frequency response: 40–20,000 Hz
- Nominal impedance: 100 Ω
  (at the phantom power adapter)

e912 pre-polarized condenser boundary microphone with half-cardioid pick-up pattern. Its acoustic properties have been optimized for instruments, vocals and speech. The e912 is an ideal choice for pianos, theater and opera productions, conference applications, altars and lecterns. Available in black or cream white.

- Frequency response: 20–20,000 Hz
- Nominal impedance: 100 Ω

e912 S A high-quality, pre-polarized condenser microphone with half-cardioid pick-up pattern, acoustically optimized for picking up speech. Due to its unobtrusive, flat design, it is ideally suited for use on conference tables, altars and lecterns. The e912 S can be switched on and off via an integrated membrane switch. Available in cream white and black.

- Frequency response: 20–20,000 Hz
- Nominal impedance: 100 Ω

e914 A condenser microphone designed for ambitious recordings and live performances. It is ideal for cymbals, hi-hats, overhead miking, choirs, and orchestras. The e914 is fitted with a three-position sensitivity switch and a three-position bass roll-off/cut-off switch.

- Frequency response: 20–20,000 Hz
- Nominal impedance: 100 Ω

evolution 800 Series

e815 S The most affordable way to enjoy the legendary evolution sound. Rugged, cardioid vocal microphone, which efficiently suppresses handling noise and sounds outside the pick-up angle. With hum compensating coil for reducing electromagnetic interference and lockable, noiseless on/off switch.

- Frequency response: 80–12,000 Hz
- Nominal impedance: 350 Ω

Variants:
- e815 S-C: with microphone clip
- e815 S-J: with microphone clip and XLR-jack cable
- e815 S-X: with microphone clip and XLR-XLR cable

e825 S Multi-purpose vocal and instrument microphone. Full metal construction with on/off switch – Sennheiser quality at an unbeatable price.

- Frequency response: 80–15,000 Hz
- Nominal impedance: 350 Ω

e835 High-quality vocal microphone. Cardioid pick-up pattern for good feedback rejection and uniform on and off-axis response. Also available as e835 S with noiseless on/off switch.

- Frequency response: 40–16,000 Hz
- Nominal impedance: 350 Ω

e840 Professional cardioid vocal microphone developed to cut through high on-stage levels. Rugged, durable construction, insensitive to handling noise. The e840 efficiently suppresses sounds emanating from outside its pick-up angle, and is fitted with a hum compensating coil for reducing electromagnetic interference. Also available as e840 S with noiseless on/off switch.

- Frequency response: 40–18,000 Hz
- Nominal impedance: 350 Ω

e845 High performance super-cardioid vocal microphone with exceptional feedback rejection. Ensures vocal projection through high on-stage sound levels. Also available as e845 S with noiseless on/off switch.

- Frequency response: 40–16,000 Hz
- Nominal impedance: 350 Ω

e865 The highlight of evolution 800 Series stage microphones. Rugged condenser mic that cuts easily through high on-stage levels. Full, precise sound, especially in the treble. Also available as e865 S with noiseless on/off switch.

- Frequency response: 40–20,000 Hz
- Nominal impedance: 200 Ω

epack e840 / e840 S The

epack e840/e840 S provides all you need for your live performance. Besides the professional evolution vocal microphone e840/e840 S, the epack includes a high-quality K&M microphone stand, a 5 m XLR cable, a microphone clip and a robust microphone pouch. The e840/e840 S has been engineered for the vocalist that needs the vocals to cut through the band. Due to its excellent acoustic properties, the e840 delivers a high signal output to cut through high on-stage sound levels with ease.
A gentle presence boost to even tonal response ensures vocal clarity and projection.

- Frequency response: 40–18,000 Hz
- Nominal impedance: 350 Ω

epack e835 / e835 S The

epack e835/e 835 S provides all you need for your live performance. Besides the professional evolution vocal microphone e835/e 835 S, the epack includes a high-quality K&M microphone stand, a 5 m XLR cable, a microphone clip and a robust microphone pouch. The e835/e835 S is a cardioid lead vocal stage microphone specially designed to perform under pressure.

- Frequency response: 40–16,000 Hz
- Nominal impedance: 350 Ω

evolution 600 Series

e602-II Dedicated mic for bass instruments. Delivers very low bass response (down to 20 Hz) and fast transient signals. No corrective EQing necessary, even on the most problematic bass signal sources.

- Frequency response: 20–16,000 Hz
- Nominal impedance: 350 Ω

e604 Robust mic for close-miking drums, brass and woodwind instruments, capable of handling very high sound pressure levels in excess of 160 dB. Delivered with drum clip for attachment to rim of drum.

- Frequency response: 40–18,000 Hz
- Nominal impedance: 350 Ω

e606 / e609 Silver Rugged supercardioid microphone for guitar and bass amplifiers, able to handle extreme sound pressure levels.

- Frequency response: 40–15,000 Hz
- Nominal impedance: 350 Ω

e608 The world's smallest dynamic microphone with a full-size sound quality. Newly developed clamp and gooseneck mounting for positioning the mic close to the sound source.

- Frequency response: 40–16,000 Hz
- Nominal impedance: 250 Ω

e614 A pre-polarized condenser instrument microphone with super-cardioid pick-up pattern. Designed for demanding applications, which require a wide frequency response, high SPL, fast transient response and a compact design.

- Frequency response: 40–20,000 Hz
- Nominal impedance: 50 Ω

Microphones
Classic Microphones.

Renowned for decades, Sennheiser's line of classic dynamic microphones has been updated with the complete re-engineering of the famous MD 421.

MD 421 II The current version of our enormously popular dynamic mic, optimal for recording drums, guitars, many other instruments, and even group vocals.

- Frequency response: 30–17,000 Hz
- Nominal impedance: 200 Ω

MD 431 II The classic dynamic mic for live vocals.

- Frequency response: 40–16,000 Hz
- Nominal impedance: 250 Ω

MD 441 U Super-cardioid, dynamic, and suited to nearly any miking situation. A true classic.

- Frequency response: 30–20,000 Hz
- Nominal impedance: 200 Ω

Microphones.
Reporter's Microphones.

MKE 400 Rugged, compact and versatile for great video sound: the MKE 400 is a small shot gun microphone for cameras with a lighting shoe mount and external microphone input for excellent recordings

- Switchable sensitivity for long and short distances
- Switchable wind noise filter
- Integral shock-mount for rejection of handling noise

MD 42 A high-quality microphone with an omni-directional pick-up pattern, optimized for use in live reporting and broadcast environments. The dynamic MD 42 features an extra-long microphone body, phenomenal sound quality and excellent suppression of handling noise. The two-ply sound inlet basket provides increased protection from wind and pop noise.

- Frequency response: 40–18,000 Hz
- Nominal impedance: 350 Ω

MD 46 A high-quality microphone with cardioid pick-up pattern, optimized for use in live reporting and broadcast environments with high levels of background noise. The dynamic MD 46 features an extra-long microphone body, phenomenal sound quality and excellent suppression of handling noise. The two-ply sound inlet basket provides increased protection from wind and pop noise.

- Frequency response: 40–18,000 Hz
- Nominal impedance: 350 Ω

Microphones.
Headset Microphones.

Ear Set 1

Ear Set 4

The Ear Set 1 and Ear Set 4 are high-quality pre-polarized condenser ear-worn microphones designed for professional applications. They differ from each other in their pick-up patterns.

- EarSet1:

- Ear Set 4:

Features of the Ear Set 1 / Ear Set 4:

- Compatible with all Sennheiser wireless microphone systems
- Individually adjustable to the ear due to flexible earband
- Cable is insensitive to structure-borne noise
- Modular design, i.e. all system components are easily interchangeable
- Very small dimensions
- Very insensitive to the penetration of sweat and moisture
- High maximum sound pressure level and excellent speech intelligibility
- Based on the proven acoustics of the MKE 1 sub-miniature clip-on microphone (Ear Set 1) or the HSP 4 headmic (Ear Set 4)
- Transparent and skin-friendly hypoallergenic adhesive tape ensures a perfect fit of the microphone boom even during strong movements and provides strain relief for the cable

HSP 2 High-quality polarized condenser headmic with omni-directional pick-up pattern, designed for professional "hands-free" applications. The adjustable neckband is visually unobtrusive and very comfortable to wear. The different HSP 2 variants differ in color, size and connector, and can, for example, be used with evolution wireless or 3000 and 5000 Series transmitters. Also available in medium size and beige.

- Frequency response: 20–20,000 Hz

HSP 4 High-quality pre-polarized condenser headmic with cardioid pick-up pattern, designed for professional "hands-free" applications. The adjustable neckband is visually unobtrusive and very comfortable to wear. The six available HSP 4 variants differ in color, size and connector, and can, for example, be used with evolution wireless transmitters or 3000 and 5000 Series transmitters. Also available in medium size and beige.

- Frequency response: 40–20,000 Hz

HS 2 The HS 2 is an omni-directional condenser headset microphone using an MKE 2 capsule and fitted with a steel wire cable and a special 3-pin connector to fit Sennheiser 3000 and 5000 Series bodypack transmitters. The small capsule and gooseneck assembly can be optimally positioned for both vocal and speech applications. Also available as HS 2-1 in beige and black.

- Frequency response: 20–20,000 Hz

ME 3 Headmic for SK 100, SK 300 and SK 500, condenser, cardioid.

- Sound pressure level: 150 dB

Microphones.
Lavalier Microphones.

Embodying Sennheiser's extensive knowledge of microphone technology in sub-miniature packages, these microphones have become the industry's standards in theater, television, and film applications.

NEW

MKE 1

Our smallest Sound Pro. Whether for musicals and live shows or for broadcasting applications, the MKE 1 – Sennheiser's smallest clip-on microphone – performs at its best in all situations where a microphone needs to be virtually invisible and still offer outstanding sound quality.

- Very high speech intelligibility; clear, pleasant treble
- Very small dimensions (3.3 mm capsule diameter)
- Thin (1 mm diameter) and robust cable; flexible with minimum handling noise
- Available in white, beige, brown and black

MKE 2

The MKE 2 is a high-quality, sub-miniature clip-on lavalier microphone that is suitable for both speech and instrument miking applications in all areas of live work. It fulfils the most stringent demands on sound quality and robustness.

- High speech intelligibility
- Very high sound pressure handling capability

MKE platinum The MKE platinum features excellent sound quality and rugged design. Its frequency response has been optimized for live stage work – the ideal partner for all transmission applications.

- High maximum sound pressure level
- Thin (only 1 mm), flexible and rugged cable, low handling noise

MKE 40 Clip-on cardioid condenser microphone for applications placing the most stringent demands on sound quality. Suited for transmitting speech in noisy or echoey surroundings.

- High gain before feedback
- Outstanding bass reproduction

System ME 102 / 104 / 105 The modular mini-microphone system fulfils professional demands for sound quality and rugged handling. Microphone capsules with omni-directional, cardioid and super-cardioid pick-up patterns as well as various connecting cables mean that the microphones in this series offer a great deal of flexibility for use as vocal and speech microphones.

- High speech intelligibility
- Robust against wind and handling noise
- Minimal inherent self-noise

ME 102

ME 102
Modular mini-microphone, omni-directional

ME 104

ME 104
Modular mini-microphone, cardioid

ME 105

ME 105
Modular mini-microphone, super cardioid

ME 2 Omni-directional lavalier microphone to be used with evolution wireless or FreePort bodypack transmitters or MZA 900 P phantom power adapter with wireless applications.

- Frequency response: 40–18,000 Hz

ME 4 Lavalier mic with cardioid pattern and exceptional feedback rejection. Can be used together with evolution wireless series or FreePort bodypack transmitters or MZA 900 P phantom power adapter with wireless applications.

- Frequency response: 80–16.000 Hz

MZA 900 P/MZA 900 P-4
phantom powered pre-amplifier.

Microphones.
Installed Sound.

Sennheiser's Installed Sound product line consists of three versatile backpre-polarized condenser microphone heads, which can be combined with various goosenecks, ceiling and table mounts. They are suitable for a wide range of applications, including conferences, public addresses, studios, broadcasts, houses of worhsip, and telelvision productions.

ME 34 High sound quality and low equivalent noise level are the features of this cardioid microphone head. The durable, matte black or Nextel metal housing has a special anti-reflection coating.

- Frequency response: 40–20,000 Hz

ME 35 Similar to ME 34, however, this microphone has a super-cardioid pick-up pattern for greater rejection of ambient sounds.

- Frequency response: 50–20,000 Hz

ME 36 The ME 36 microphone head features a super-cardioid/lobar pick-up pattern with excellent directivity and maximum rejection of unwanted sounds. Its superior sound quality and high gain before feedback is matched by a low equivalent noise level. The durable, matte black or Nextel metal housing has a special anti-reflection coating.

- Frequency response: 40–20,000 Hz

MZH 3015 / MZH 3015 L Metal

gooseneck for use with the ME 34, 35 and 36 microphone heads. The durable matte black or Nextel gooseneck is fitted with a balanced, floating XLR-3 output, enabling the microphone to work with 12–48 V phantom power. Also available as MZH 3015 L in matte black finish with red LED ring and XLR-5 connector.

- Length: 150 mm

MZH 3040 / MZH 3040 L Metal

gooseneck for use with ME 34, ME 35 and ME 36 microphone heads. The durable matte black or Nextel gooseneck is fitted with a balanced, floating XLR-3 output, enabling the microphone to work with from 12–48 V phantom power. Also available as MZH 3040 L in black finish with red LED ring and XLR-5 connector.

- Length: 400 mm

MZH 3042 / MZH 3042 L Metal use

with gooseneck with two flexible sections for ME 34, ME 35 and ME 36 microphone heads. The durable matte black or Nextel gooseneck is fitted with a balanced, floating XLR-3 output, enabling the microphone to work with 12–48 V phantom power. Also available as MZH 3042 L in black finish with red LED ring and XLR-5 connector.

- Length: 400 mm

MZH 3062 Metal gooseneck with two

flexible sections for ME 34, ME 35 and ME 36 microphone heads. The durable matte black or Nextel gooseneck is fitted with a balanced, floating XLR-3 output, enabling the microphone to be powered from 12–48 V phantom power.

- Length: 600 mm, Weight: 160 g

MZH 3072 Metal gooseneck with two

flexible sections for ME 34, ME 35 and ME 36 microphone heads. The durable matte black or Nextel gooseneck is fi tted with a balanced, floating XLR-3 output, enabling the microphone to be powered from 12–48 V phantom power.

- Length: 700 mm, Weight: 173 g

MZFS 60 / MZFS 80 Floor stands for MZH 3015, MHZ 3040 and MZH 3042 goosenecks. Available heights: 60 and 80 cm. Available in matte black or Nextel finish in 60 and 80 cm height. Can be converted to wireless operation using a SKP plug-on transmitter with phantom powering. Available in matte black or Nextel finish.

MZS 31 Shock-mount for MZH goosenecks.

MZC 30 Connecting cable XLR-3M to special coax socket (ME 34, 35, 36) for ceiling-mounting.

MZH 30 Metal ceiling mount to adjust mic heads ME 34, 35 and 36.

MZTX 31 / MZTX 31 PTT Table stands with XLR-3 connector. The MZTX 31 PTT is fitted with a microphone button that can be switched between mic on/off and push-to-talk operation. The stands can be converted to wireless operation using a SKP plug-on transmitter that provides phantom powering. It's available in matte black or Nextel finish.

Microphone.
Optical Microphone.

MO 2000 With a non-metallic, non-electric microphone head, the optical microphone is completely insensitive to electrostatic and magnetic fields, ionizing radiation and extreme humidity. It is ideal for use in computer tomography, as a measuring microphone in EMC testing equipment, for industrial applications and in hazardous areas.

- Polar pattern: Omni directional
- Sensitivity: 15 mV/Pa
- Max. sound pressure level: 134 dB

IAS MO 2000 SET IAS MO 2000 SET additionally also has MZWW 2000 weather and wind protection. It complies with IP 54. Therefore it works perfectly in outdoor applications especially in explosion endangered areas (e.g. acoustical surveillance of gas pipelines).

- Certified according to:
  EN 60079-0: 2004
  EN 60079-28:2007
  TÜV 07 ATEX 553824
  TÜV 07 ATEX 553825X

Microphones.
K6 Microphones.

The K6 Modular System is a versatile professional condenser microphone system of exceptionally high quality. Available with a wide variety of modules for different powering arrangements, polar patterns, and capsule sizes, the K6 System provides a flexible tool for all recording and sound reinforcement work.

K6 The K6 powering module that supplies battery or phantom power. The K6 can be combined with different condenser microphone heads to provide a wide variety of polar patterns.

- Switchable bass roll-off filter protects against rumble, handling, pop and wind noise
- On/off switch with battery test

K6P Alternative to K6: supply adapter for phantom powering.

- Switchable bass roll-off filter protects against rumble, handling, pop and wind noise
- On/off switch

ME 62 The ME 62 is an omni-directional microphone head suitable for K6 and K6P powering modules. It can be used for reporting, discussions and interviews. The ME 62 is particularly suitable for good reproduction of "room" ambience and "spaced omni" stereo recording

- Wide frequency response
- Minimal inherent self-noise

ME 64 The ME 64 is a cardioid microphone head designed for use with the K6 and K6P powering modules. It has a very wide range of applications including reporting, interviews, dubbing, live sound reinforcement and recording applications

- High speech clarity
- Very good feedback rejection

ME 65 The ME 65 is a super-cardioid microphone head designed for use with the K6 and K6P powering modules. It is especially suited to vocal and speech applications.

- Close-up microphone
- Frequency-independent directivity ensures excellent feedback rejection

ME 66 The ME 66 is a short gun microphone head designed for use with the K6 and K6P powering modules. It is especially suitable for reporting, film and broadcast location applications and for picking up quiet signals in noisy or acoustically live environments as it rejects sound not coming from the main pick-up direction.

- Highly directional
- High sensitivity

ME 67 The ME 67 is a long gun microphone head designed for use with the K6 and K6P powering modules. A highly directional microphone, it can be used where the microphone must be placed at a distance from the sound source.

- Extremely high directionality
- High sensitivity factor

Microphones.
MKH Condenser Microphones.

The sophisticated MKH Series microphones incorporate Sennheiser technology into condenser mics of superlative quality. Used by recording studios, film and television production companies, and broadcast professionals all over, the MKH line provides a flexible array of polar patterns and sizes, all optimized for totally transparent, "colorless" sound reproduction.

MKH 20 The MKH 20 is frequently used as a main microphone for orchestras and solo instruments, picking up the natural acoustics of the room.

- Switchable for near and diffuse field applications
- Frequency response 12 to 20,000 Hz

MKH 30 Condenser microphone with a figure-of-eight pick-up pattern. "Predestined" for MS stereo recordings. As a spot microphone, it is particularly useful in the effective suppression of sounds from adjacent sound sources.

- Especially symmetric and frequency-independent pick-up pattern
- Switchable roll-off filter and pre-attenuation

MKH 40 The MKH 40 has a large number of applications, for example as a main microphone, especially in lightly reverberant or acoustically less perfect rooms, with instrumental groups or for speech applications.

- Maximum front-to-back ratio
- Switchable roll-off filter and pre-attenuation

MKH 50 The super-cardioid MKH 50 offers higher attenuation of diffuse field and lateral sound than the cardioid microphone. It is principally designed for use as a soloist's or spot microphone for applications requiring a high degree of muting of side-borne sound and feedback rejection.

- Frequency-independent pick-up pattern
- High gain before feedback

MKH 60 The MKH 60 is a lightweight short gun microphone. It is versatile and easy to handle, and its superb lateral sound muting makes it an excellent choice for film and reporting applications. Its high degree of directivity ensures high sound quality for distance applications.

- Switchable pre-attenuation, switchable roll-off filter and switchable treble emphasis
- Rugged and weather-proof

MKH 70 The MKH 70 is a lightweight long gun microphone. Its excellent directivity is particularly suited to applications undertaken in difficult conditions, such as high background noise and distance microphone positioning. Its frequency-independent directivity prevents sound coloration from off-axis sound sources.

- Infra-sonic cut-off filter
- Rugged and weather-proof

MKH 416 Versatile, medium-length and extremely rugged interference tube microphone. Tried and tested microphone for universal use in radio, film and television applications, especially for outdoor reporting.

- Increased directivity due to interference tube principle
- Rugged, suitable for adverse climatic conditions

MKH 418 S M/S shotgun microphone with super cardioid (M) and figure-8 (S) pick-up patterns for use in ENG and location sound.

- Very good consonant clarity
- Convincing spatial representation

MKH 800 With five switchable pick-up patterns and multi-level switchable tone controls, the MKH 800 is the superior microphone for all recording situations. The acoustic concept ensures a stable pick-up pattern across the entire frequency response range, for high clarity and minimum coloration.

- Extended frequency response up to 50 kHz
- Switchable pre-attenuation, switchable roll-off filter and switchable treble emphasis

MKH 800 TWIN Dual capsule RF condenser microphone with remote controlled polar patterns. By providing both capsule signals at the output, the polar pattern can be adjusted steplessly at the mixing desk during post production. Nextel and Nickel finish available. The remote adjustability and the variable pick-up pattern make the MKH 800 TWIN a universal main microphone, soloist microphone or spot microphone.

- Very low inherent noise prevents the masking of filigree sound structures
- Stable pick-up patterns minimize sound distortion in the direct and diffuse fields

Microphones.
MKH 8000 Series.

The MKH 8000 Series has been designed to capture the soul of sound, reproducing the music with an unprecedented warmth and transparency. Voices will sound rich and detailed. Pianos, strings and wind instruments will have that special natural character, while percussion instruments benefit from a fast attack and a dynamic, powerful reproduction.

MKH 8020

The omni-directional MKH 8020 is ideal for recording large and small sound sources, for a "Decca Tree" or for use in an OSS "Jecklin Disk" array. As it does not suffer from a proximity effect, it is also a good choice for close-miking. The extra octave at the bottom end makes the MKH 8020 perfect for recording pipe organs, grand piano and acoustic double-bass.

- Extended frequency response 10 to 60,000 Hz
- Ideal for stereo and surround recordings, as an M microphone and for ambience

MKH 8040

The cardioid MKH 8040 is suitable for almost any application. It considerably reduces pick-up of a reverberant room. This is very helpful in rooms with poor acoustics or when disturbing sounds interfere mainly from the rear.

- Extended frequency response 30 to 50,000 Hz
- Perfect for use as a spot microphone for surround recordings

MKH 8050 The super-cardioid MKH 8050 will give higher attenuation of off-axis sound from the side than its cardioid sister model. It is a good choice for recording soloists, where the requirements for lateral acoustic separation are higher.

- Extremely accurate directional pattern due to acoustically transparent housing design
- Provides ideal separation of instruments

MZF 8000 is a filter module for the MKH 8000 professional RF condenser microphone series. Especially in the broadcast and film industries, it effectively blocks interference caused by infrasound, such as low-frequency noises caused by wind and handling.

- Switchable roll-off filter (–3 dB at 160 Hz)
- Fixed low-cut filter (–3 dB at 16 Hz)
- High quality –10 dB pad protects against overdriving

MZD 8000 The digital module for the MKH 8000 series converts microphone signals immediately after the microphone head. It is compliant with the AES 42 standard. The fantastic sound of the MKH 8000 series can be converted to digital directly at the microphone head, ensuring natural sound without any loss of quality.

- 2-channel 24-bit AD converter, dynamic range 115 dB
- External synchronisation via AES 42, Mode 2
- Sampling rate 44,1 kHz, 48 kHz, 88,2 kHz, 96 kHz, 176,4 kHz and 192 kHz

RF Wireless Systems.
Professional Wireless Series.

SKM 5200-II The next generation of the SKM 5200 world class microphone. Robust, reliable and user-friendly, the professional hand-held transmitter is suitable for every conceivable type of recording and transmission situation. The HiDyn *plus*™ noise suppression system reduces RF noise to an absolute minimum, ensuring a wide dynamic range and crystal-clear sound.
The SKM 5200-II is available in four frequency variants – L, N, N-US and P – as well as in three colors: black, nickel and steel blue (haematite). The handheld transmitter is compatible with all capsules, battery and rechargeable battery compartments of the 5000 series as well as with Neumann microphone heads.

- Frequency range: 470–866 MHz
- Switching bandwidth: up to 184 MHz
- Low intermodulation mode (LoI)
- Output power: typ. 50 mW, 10 mW, 10 mW LoI switchable
- SKM 5200 with 36 MHz switching bandwidth still available

NEW

NEW

SK 5212-II

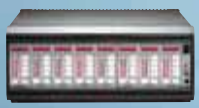
Extremely small bodypack transmitter with durable metal housing for broadcast and musical applications. New: Enhanced switching bandwidth with up to 184 MHz.

- Frequency range: 450–866 MHz
- Switching bandwidth: up to 184 MHz
- Output power: typ. 50 mW, 10 mW, 10 mW LoI switchable
- HiDyn *plus*™
- SK 5212 with 36 MHz switching bandwidth still available

SK 50-A / SK 250

Bodypack transmitter, world-class broadcast standard.

- Frequency range: 450–960 MHz
- Switching bandwidth: 36 MHz
- HiDyn *plus*™
- Output power: SK 50-A: typ. 50 mW
  SK 250: typ. 250 mW



EM 1046

The heart of multiple-frequency RF technology, the EM 1046 receiver system offers eight channels of pristine RF wireless audio.

- Frequency range: 450–960 MHz
- Switching bandwidth: 36 MHz
- HiDyn *plus*™
- Modular multi-channel receiver system
- Large mainframe houses up to 8 true diversity receiver modules

NEW

EM 3732-II / EM 3731-II Highest operational reliability with great convenience and comfort for the user! The wide switching bandwidth of up to 184 MHz and many connection options make these receivers the most flexible tools in the market.
They feature a number of innovative functions, such as a digital audio output, high-contrast OLED display and extraordinarily intuitive operation via an icon-based menu. With the Ethernet connector, the receivers can easily be integrated into any network. Sennheiser's "Wireless Systems Manager" (WSM) software allows you to monitor and control all receiver operating statuses remotely.

- Frequency range: 470–960 MHz
- Switching bandwidth: up to 184 MHz
- DSP-based expander with HighDyn *plus*™ and HDX
- Integrated active antenna splitter for daisy-chaining of up to eight devices
- EM 3732 COM-II with command audio output

ASA 3000 Active 2 x 1:8 antenna splitter for multi-channel wireless microphone systems with up to 16 channels with twin receivers.

- Frequency range: 470–870 MHz
- DC power supply for antenna boosters

EK 3241 Slot-in true diversity receiver designed for use with camcorders. Its frequency agility and reliability ensure flexible operation worldwide.

- Frequency range: 450–960 MHz
- Switching bandwidth: 36 MHz
- HiDyn *plus*™

SKM 3072-U Handheld transmitter with up to 32 switchable channels. Supplied with super-cardioid mic head for vocals and close-miking. Also available: interchangeable super-cardioid microphone head for speech applications.

- Frequency range: 450–960 MHz
- Switching bandwidth: 32 MHz
- Output power: 30 mW
- HiDyn *plus*™

SK 3063-U Pocket transmitter with up to 16 selectable frequencies. For use with clip-on mics or headworn microphones.

- Frequency range: 450–960 MHz
- Switching bandwidth: 24 MHz
- Output power: 30 mW
- HiDyn *plus*™

SKP 3000 Plug-on transmitter, which converts any cabled microphone (even condenser microphones) for RF wireless operation.

- Frequency range: 518–866 MHz
- Switching bandwidth: 36 MHz
- Output power: 30 mW
- Phantom powering
- HiDyn *plus*™

RF Wireless Systems.
2000 Series.

Whether theater, broadcast, live or at a convention: Sennheiser's 2000 series is the first choice of sound engineers and rental agencies. This versatile, flexible system lets you take sure control of complex stage events. When it comes to broadcasting, the 2000 series is your personal entry into the world of professional audio transmission.

SKM 2000 The hand-held transmitter of the 2000 Series shows its strength during use, in its performance, in its features: switchable transmission power, intuitive menu navigation, an easy-to-read graphic display make it convenient for daily use. The SKM 2000 is compatible with all evolution wireless capsules, including the MMK 965-1 true condenser capsule, whose wired version, e965, has already proven to be a great success.
Colors: nickel and black

- Frequency range: 516–865 MHz
- Switching bandwidth: up to 75 MHz
- Output power: 10, 30, 50 mW (US: 100 mW)
- HDX

SK 2000 The compact SK 2000 bodypack transmitter is versatile and reliable during the wireless transmission of instruments and voice. Bass guitarists especially appreciate its excellent audio quality due to the enhanced frequency response (25–20,000 Hz). Three RF output powers (four in the US version) provide longer transmission ranges or more channels per frequency range.

- Frequency range: 516–865 MHz
- Switching bandwidth: up to 75 MHz
- Output power: 10, 30, 50 mW (US: 100 mW)
- HDX

SKP 2000 The SKP 2000 plug-on transmitter with phantom powering makes wireless audio transmission from wired reporters' microphones possible. The graphic display makes adjusting and saving settings easy, even under poor light conditions. Its switchable output power turns the SKP 2000 into a strong companion during any mobile recording session.

- Frequency range: 516–865 MHz
- Switching bandwidth: up to 75 MHz
- Output power: 10, 30, 50 mW (US: 100 mW)
- Phantom powering
- HDX

EM 2000

EM 2050

EM 2000 / EM 2050 The EM 2000 true diversity receiver is the heart of the 2000 Series.
With 5 frequency ranges and a switching bandwidth of up to 75 MHz, the EM 2000 provides maximum flexibility. The Ethernet connection lets you control your system from your PC or Mac directly over the WSM (Wireless Systems Manager) software. The integrated active antenna splitter makes it possible to build up systems having up to 16 channels without requiring an external splitter.

- Frequency range: 516–865 MHz
- Switching bandwidth: up to 75 MHz
- HDX

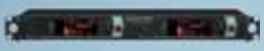
EK 2000 It is nice when you can concentrate fully on the picture because you know the sound is reliable. This camera receiver allows you to do just that.
Equipped with adaptive diversity, this camera receiver ensures reliable reception in five frequency ranges with up to 75 MHz switching bandwidth. The transmitter settings can be synchronized quickly from the EK 2000 using infrared technology.

- Frequency range: 516–865 MHz
- Switching bandwidth: up to 75 MHz
- HDX

EK 2000 IEM This wireless monitoring bodypack receiver is extremely robust. The metal battery compartment cover is well-suited to the hard life on the stage. Adaptive diversity technology has also increased transmission reliability significantly. The earphone cable serves as a second antenna, which considerably reduces the number of drop outs.

- Frequency range: 516–865 MHz
- Switching bandwidth: up to 75 MHz
- HDX

SR 2000



SR 2050

SR 2000 / SR 2050 When it comes to wireless monitoring, the 2000 Series is setting new standards. The switching bandwidth of up 75 MHz and a switchable transmission power of 10, 30 and 50 mW (plus 100 mW in the US version) let you reach a maximum of reliability and flexibility. The built-in Ethernet interface provides ideal viewing of the monitoring system from your PC or Mac, plus perfect integration, even into complex wireless systems.

- Frequency range: 516–865 MHz
- Switching bandwidth: up to 75 MHz
- Output power: 10, 30, 50 mW (US: 100 mW)
- HDX

AC 3000 Active antenna combiner for creating 8-channel wireless monitoring systems. Active antenna combiner 8:1 for IEM systems

- Frequency range: 470–870 MHz
- RF input power: max. 80 mW per input

AC 3200 Active antenna combiner for creating 8-channel wireless monitoring systems. Active antenna combiner 8:1 for IEM systems

- Frequency range: 500–870 MHz
- RF input power: max. 250 mW per input

RF Wireless Systems.
evolution wireless G3 500 Serie.

The 500 Series is the top line of evolution wireless. Sound professionals and artists who work on the world's biggest stages rely on G3.
A wireless system at this price point cannot be more flexible and versatile.

500 Series Features

- Mac- and PC-controlled frequency management
- Ethernet port for Wireless Systems Manager (WSM) software
- Enhanced frequency bank management with up to 32 compatible frequencies
- Frequency ranges: 516-558, 566-608, 626-668, 734-776, 780-822, and 823-865 MHz

Vocal Set Raise your voice with the tour-proven wireless microphone and absolutely reliable sound transmission. Choose between three professional microphone heads (two dynamic and one condenser) from the renowned Sennheiser evolution 900 line.

Instrument Set Rocking the crowd has never been so easy or professional. The integrated control menu with guitar cable emulation, the RF/AF mute for multiple guitars and the integrated guitar tuner ensure that you have absolute control of your gig.

Presentation Set There is no better way to express yourself and impress your audience than with the professional G3 presentation set. The extremely small MKE 2 clip-on microphone is renowned for its highest sound quality and robustness.

RF Wireless Systems.
evolution wireless G3 300 Serie.

You Know You Can Set New Standards
The 300 Series is at its best at conferences, presentations and live events. Speakers and presenters love the crystal-clear sound of the microphones, and as a technician, you can rely on a flexible and versatile wireless system that gives you full control of your event.

300 Series Features

- Mac- and PC-controlled frequency management
- Ethernet port for Wireless Systems Manager (WSM) software
- Enhanced frequency bank management with up to 24 frequencies per bank
- Frequency ranges: 516-558, 566-608, 626-668, 734-776, 780-822, and 823-865 MHz

Vocal Set With the crystal-clear sound of the handheld microphone, you can make yourself heard right back to the last row. The microphone's mute function can be used for push-to-talk and push-to-mute offering you full control of your performance.

HeadSet The lightweight and comfortable headset microphone offers you total freedom to move during your speech or presentation. A special frequency response ensures a safe and clear sound transmission.

Set with clip-on microphone ME 2

Set with clip-on microphone ME 4

Presentation Set Make your speech or presentation state-of-the-art with the small clip-on microphone that is easy to wear and nearly invisible on stage. Its clear sound transmission gives you the freedom to move and act.

RF Wireless Systems.

evolution wireless G3 100 Series.

You Know You Can Count On Breakthrough Sound. Thanks to its expanded bandwidth (42 MHz), 1680 switchable frequencies, and the perfect Sennheiser live sound, the 100 Series is the ideal choice for musicians and presenters, and best suitable for camera and wireless monitor applications.

100 Series Features

- Infrared interface for synchronization of transmitters
- Increased audio range
- More control options (menu)
- Enhanced frequency bank with up to 12 compatible frequencies per bank
- Frequency ranges: 516-558, 566-608, 626-668, 734-776, 780-822, and 823-865 MHz

Vocal Set Gone are the days when a singer had to shout into the microphone to be heard. The robust handheld transmitter delivers full first-rate live sound. You can choose from 5 exchangeable microphone heads (4 dynamic and one condenser).

Instrument Set Who says a guitarist always has to stand in one place? The G3 Instrument Set gives you the freedom to rock the crowd wherever you are on stage: no strings attached. Brand new with G3: the integrated guitar tuner makes a tuning device unnecessary.

HeadSet Regardless of whether you are a singer, actor, dancer or fitness trainer: With the special frequency response of this headset microphone, your voice will be heard at the very back in the last row.

Set with clip-on microphone ME 2

Set with clip-on microphone ME 4

Presentation Set A professional quality standard that has proven itself for moderation and on stages alike. Impress your audience with a crystal-clear presentation. The small clip-on microphone offers excellent speech intelligibility with its special frequency response.

4 Sets available with different system components

ENG Set Capture the right moment with the ENG Set for perfect sound transmission while filming. Four different sets are available including either a handheld transmitter or a body pack transmitter with an omni-directional or cardioid clip-on microphone.

Wireless Monitor Set The Wireless Monitor Set gives you complete control of your performance across the entire stage. The body pack diversity receiver with volume control is as easy to use as the stereo transmitter, which offers PC-controlled monitoring of multi-channel applications via the Wireless Systems Manager (WSM) software.

RF Wireless Systems.

freePORT™

With freePORT™, Sennheiser offers the ideal entry-level RF wireless systems – easy to use, durable and affordable. Simply insert the transmitter batteries, connect the receiver and you're ready to go! freePORT is ideal for applications such as garage band gigs, singers, presenters, a small-scale theater production, and a company presentation.

freePORT™ Vocal Set

Assertive, punchy sound is the hallmark of the freePORT vocal set. It includes a handheld transmitter with dynamic capsule and a diversity receiver.

Handheld Transmitter
- Dynamic capsule, cardioid
- Frequency response: 80–18,000 Hz
- LED for battery power

Receiver
- Diversity
- Signal-to-noise ratio: > 95 dB (A)
- THD: < 1 %

freePORT™ Instrument Set

The instrument set impresses with durability, full-bodied sound and wide dynamics. It contains a bodypack transmitter with instrument cable and a diversity receiver, and is ideal for guitars or any other instrument with a jack output.

Instrument Transmitter
- Frequency response: 60–18,000 Hz
- MIC/Line switch
- LED for battery power

Receiver

Instrument Cable

freePORT™ Presentation Set

The presentation set ensures excellent speech intelligibility for talks, presentations and small-scale theater productions. It consists of a bodypack transmitter, a diversity receiver, and an inconspicuous clip-on microphone with omni-directional pick-up pattern.

Bodypack Transmitter
- Frequency response: 60–18,000 Hz
- MIC/Line switch
- LED for battery power

Receiver

Clip-on Microphone
- Natural sound
- Inconspicuous to wear

Infrared Systems.
Infrared Audio Distribution Systems

Suitable for public addresses, conferences, museums, exhibtions, translation and other applications. Sennheiser infrared wireless systems are an effective and convenient alternative to conventional hard-wired systems. With their unique amplitude and frequency modulation

SZI 1029 Large area radiator.
- Transmission area: 800 m^2/number of channels

SZI 1029-24 24-volt DC powered radiator.

SZI 1029-10 10 watt version for up to 1,600 m^2/number of channels.

Single / Two-Channel Wideband Systems

SZI 1015 Medium area DC powered emitter.

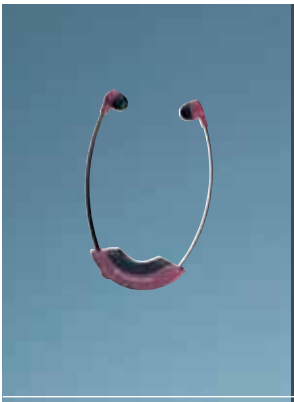
- Transmission area: 400 m²
- SZI 1015-T Single-channel master modulator/emitter.
- Carrier Frequency: 2.3 MHz

SI 30 / SZI 30 Small area modulator/ radiator or radiator only.

- Transmission area: 80 m² (single-channel), 40 m² (two-channel)
- Carrier frequencies: 2.3 MHz/2.8 MHz

SI 1015 Two-channel wideband modulator operating on higher-than-standard carrier frequencies (2.3/2.8 MHz) for superior interference resistance.

- Carrier frequencies: 2.3 MHz/2.8 MHz
- Frequency response: 20–15,000 Hz



RI 150 Very affordable, ultralight mono stethophone receiver.

- Carrier Frequency: 2.3 MHz
- Frequency response: 18–18,000 Hz

HDI 830 Professional, switchable two-channel receiver with volume control.

- Carrier frequency: 2,3/2,8 MHz
- Frequency response: 50–16,000 Hz
- Automatic On/Off

RI 830 S Professional, switchable two-channel receiver with 3,5mm jack-plug (Induction loop available as accessory.)

- Carrier frequency: 2,3/2,8 MHz
- Frequency response: 50–16,000 Hz

L 300 10-10 Charging tray for the receivers RI 830, RI 830 S, HDI 830, RI 900, RR 840 and RR 840 S as well as BA 300 batteries.

Multi-Channel Systems

SI 29-5 Single rack-space modulator that transmits up to five narrowband channels. Cascadable up to 32 channels.

- Carrier frequencies: 55–1,335 kHz

HDI 1029 PLL 8 A very lightweight, easy-to-use stethophone receiver with 8 channels.

HDI 1029 PLL 16 A very lightweight, easy-to-use stethophone receiver with 16 channels. Also available as PLL 16-H version, which uses channels 16–31.

EKI 1029 PLL 16 / PLL 32 Slim, compact multi-channel bodypack receiver with 16 or 32 channels. Also available as PLL 16-H version, which uses channels 16–31.

Audiology.
Assistive Listening Devices.

Words that get under your skin, music that makes your heart beat faster, film scenes that give you goosebumps – with the Sennheiser mobile sound amplifiers and TV listening systems you hear everything clearly and precisely. Enjoy wireless sound in excellent quantity, adjustable according to your individual preferences. High wearing comfort and easy handling can be taken for granted.

Set 900 The Set 900 is not only a high-quality wireless stereo TV listening system with infrared transmission, but also a mobile sound amplifier. Microphones can record the ambient sounds and send them amplified to the ears. Thus, you notice all those small details and nuances of speech and sound.

- Transmission frequencies: 2.3 MHz/2.8 MHz
- Reception frequencies: 2.3 MHz/2.8 MHz/95 kHz
- Frequency response: 50–16,000 Hz
- Range (Transmitter): up to 12 m

reddot design award winner 2010

Designpreis Deutschland 2010 NOMINEE

Set 840-TV The stereo Set 840-TV allows you complete freedom of movement throughout the house. Thanks to modern radio technology you can move around within a radius of 100 m – in the home or in the garden – and still enjoy television news, audio books or music in great sound quality. There are three hearing settings on the transmitter, so you can choose the best for optimum speech intelligibility: volume compression and treble emphasis can be activated and combined, the treble emphasis can also be adjusted individually. Convenient: the receiver turns on automatically when it is put on. Even more convenient: the flexible ear pads fit exactly and are very comfortable to wear.

- Carrier frequencies: 863.30 MHz/864.0 MHz/864.7 MHz or 925.95 MHz/926.8 MHz/927.5 MHz
- Frequency response: 50–16,000 Hz
- Range: up to 100 m or 30 m

Set 830-TV The Set 830-TV is a stereo TV listening system. The infrared model enables listening anywhere in the room without the need for cables and without disturbing others. Directly connectable to a TV, hi-fi system or radio, the Set 830-TV guarantees outstanding sound quality which you can customize to your own hearing with for example, individual treble emphasis. What's more, the receiver is extremely lightweight and, with its perfect-fitting ear pads, offers maximum comfort when worn. Ergonomic controls and visual signals for the individual control processes mean that operation of the Set 830-TV couldn't be easier.

- Carrier frequencies: 2.3 MHz/2.8 MHz
- Frequency response: 50–16,000 Hz
- Range: up to 12 m

Set 840 S – Specially designed for wearers of hearing aids, the Set 840 S transmits stereo sound via a radio frequency connection from the television or hi-fi system up to 100 m – even through walls. The signal is received clearly and precisely by a hearing aid with activated telecoil via the induction loop. Alternatively, normal headphones or induction couplers can be connected to the receiver. After use the receiver can be placed in the charging cradle facing either way.

- Carrier frequencies:
  863.30 MHz/864.0 MHz/864.7 MHz or
  925.95 MHz/926.8 MHz/927.5 MHz
- Frequency response: 50–16,000 Hz
- Range: up to 100 m or 30 m

Set 830 S The Set 830 S is essentially the same as the Set 840 S, but does not transmit a radio frequency signal, it transmits an infrared signal up to 12 m within a room. The signal is transmitted from the receiver to the hearing aid with activated telecoil via the induction loop supplied with the set. You can choose from three hearing settings on the transmitter and adjust compression and treble emphasis to optimise the speech intelligibility and sound quality. Volume and balance control are conveniently located on the receiver.

- Carrier frequencies: 2.3 MHz/2.8 MHz
- Frequency response: 50–16,000 Hz
- Range: up to 12 m

Audioport A 200 The A 200 audioport is a good alternative for people who would like amplified sound occasionally, but do not want to wear a hearing aid. Two integrated microphones transmit voices and sounds in detail and amplified to the ears. Furthermore, the A 200 is very easy to use. The on/off switch and the volume control are positioned directly on the receiver. And when it is not needed, it is simply put in the cradle to recharge.

- Frequency response: 200–12,000 Hz
- Microphones: Pre-polarized condenser mics, stereo

EZT 3011 The EZT 3011 is an induction loop for use with the RI 830 S and RR 840 S receivers. It transmits the audio signal from the receiver to hearing aids with an induction coil. You can attach the receiver directly to the induction loop and wear it. The EZT 3011 is equipped with a 3.5 mm stereo jack plug.

EZT 3012 The EZT 3012 is an induction loop for use with Sennheiser's wireless receivers. It transmits the audio signal from the receiver to hearing aids with an induction coil. The induction loop is equipped with a 40 cm long connection cable with a 3.5 mm stereo jack plug.

Audiology.
Audiometric Headphones.

Hearing aid acousticians and ENT doctors have to be able to rely on modern diagnostic technology and so they expect the highest quality – especially when diagnosing hearing problems with the aid of an audiometer. Sennheiser offers specially developed headphones that relay the test sounds produced in different frequencies to the patient's ears accurately and exactly: for precise measurement readings.

HDA 200 Closed, dynamic audiometric headphones designed for extended high-frequency testing.

- Frequency range: 20–20,000 Hz
- Nominal impedance: 40 Ω
- Reference headphones listed in ISO standards ISO 389-5 and ISO 389-8
- Tested and certified by the Physikalisch-Technische Bundesanstalt (PTB) (German institute for standards) in accordance with IEC 60645-1

HDA 280 Closed, dynamic headphones for use with audiometers, with fold-up and swivelling earpieces for space-saving transport.

- Frequency range: 20–20,000 Hz
- Nominal impedance: 37 Ω
- Tested and certified by the Physikalisch-Technische Bundesanstalt (PTB) (German institute for standards) in accordance with IEC 60645-1

Aviation.
Aviation Boomsets.

Bringing Sennheiser technology to the air, these products provide the finest aviation communication available. The active noise cancellation headsets, featuring Sennheiser's exclusive NoiseGard™ attenuation circuitry for hearing protection and safety, are already in use by professional and private aviators throughout the world. The headsets equipped with Sennheiser microphones (either electret or dynamic) are perfect for hands-free operation.

Active Noise Cancellation Headsets

HMEC 26 *NoiseGard*™ series

A lightweight supra-aural closed-cup headset designed to actively reduce cockpit noise. The HMEC 26-T Version offers a Talk-Through function.

Headphones
- Frequency response: 20–14,000 Hz
- Active noise reduction: typ. 18 dB between 100–300 Hz

Microphone
- Type: BKE 46 prepolarized condenser, noise-compensated
- Frequency response: 300–6,000 Hz

Available with various connectors, ETSO C57a & C58a, TSO-C139

HMEC 46 *NoiseGard*™ series

very lightweight and comfortable open boomset with NoiseGard active noise compensation. Different connector and powering versions are available to suit all possible cockpit configuration.

Headphones
- Frequency response: 20–14,000 Hz
- Active noise reduction: 15 dB +/- 3 dB between 100–500 Hz

Microphone
- Type: BKE 46 prepolarized condenser capsule, noise-compensated
- Frequency response: 350–6,000 Hz (RTCA/DO-214)

ETSO C57a & C58a, TSO C139

HMEC 460 Series

Closed-cup headset with NoiseGard™ active noise compensation and excellent passive attenuation. Ideal for the loud cockpits of propeller-driven and turboprop aircraft.
With volume control, audio-in, cellphone-in.

Headphones
- Frequency response: 45–15,000 Hz
- Noise Compensation (active and passive): > 25–40 dB

Microphone
- Type: BKE 45-1 prepolarized condenser, noise-compensated
- Frequency response: 300–5,000 Hz

HMEC 350 *NoiseGard™* series

Closed-cup headset with NoiseGard™ active noise compensation. Ideal for the loud cockpits of helicopters, propeller-driven and turboprop aircraft. With volume control, mono/stereo switch and flexible microphone boom.

Headphones
- Frequency response: 45–15,000 Hz
- Noise Compensation (active und passive): > 25–40 dB

Microphone
- Type: BKE 45-1 prepolarized condenser, noise-compensated
- Frequency response: 300–5,000 Hz (RTCA/DO-214)

Available with various connectors, FAA & JAA TSO approval C57a, C58a.

The New Generation:

Due to their very attractive and foldable design the HME 95 and HMEC 250 are the first models of a new design generation of Sennheiser General Aviation Headsets.

HMEC 250 The HMEC 250 is an entry headset with active noise compensation NoiseGard™ 2.0. With volume control, audio-in, cellphone-in.

Headphones
- Frequency response:
  8–28,000 Hz (headphone)
  300–5,000 Hz (talk-through)
- Nominal impedance
  passive: 150 Ω mono, 300 Ω stereo
  active: 600 Ω mono, 1200 Ω stereo

Microphone
- Type: BKE 46 prepolarized condenser, noise-compensated
- Frequency response:
  300–6,000 Hz (headphone)

HME 95 The HME 95 is an entry headset with passive noise attenuation that is good value for money. With volume control, audio-in, cellphone-in.

Headphones
- Frequency response: 8–28,000 Hz
- Nominal impedance
  passive: 225 Ω mono,
  300 Ω stereo

Microphone
- Type: BKE 46 prepolarized condenser, noise-compensated
- Frequency response: 300–6,000 Hz

Passive Noise Cancellation Headsets

HME 26 Serie A lightweight headset with closed headphone systems. The new models are extremely comfortable because of the especially soft earpads.

Headphone
- Frequency response: 20–14,000 Hz

Microphone
- Type: BKE 46 prepolarized condenser, noise-compensated
- Frequency response: 350–6,000 Hz (RTCA/DO-214)

Available with various connectors, ETSO C57a & C58a, TSO C139

HME 46 series These boomsets successfully combine proven functionality with the latest audio technology and maximum user comfort. The HME 46 incorporates peak level protection.

Headphones
- Frequency response: 20–14,000 Hz

Microphone
- Type: BKE 46 prepolarized condenser, noise-compensated
- Frequency response: 350–6,000 Hz

ETSO C57a & C58a, TSO C139

HME 43 Pilot's headset with closed ear protector headphones and ultra noise-canceling microphone for use in airline jets and business jets.

Headphone
- Frequency response: 200–6,000 Hz
- Nominal impedance: 300 Ω

Microphone
- Type: BKE 43 prepolarized condenser, noise-compensated
- Frequency response: 350–3,400 Hz

HME 110 The special edition featuring an elegant high-tech finish, the HME 110 pilot's headset is ideal for use in propeller and turbo-prop aircraft. This headset is extremely comfortable thanks to soft earpads and an optimized headband.

Headphones
- Frequency response: 45–15,000 Hz

Microphone
- Type: BKE 45-1 prepolarized condenser, noise-compensated
- Frequency response: 300–5,000 Hz (RTCA/DO-214)

FAA & JAA TSO C57a, C58a

HME 100 Passive, closed-cup aviation headset – the lower-cost alternative to the HMEC 350 NoiseGard™ model. With volume control and flexible microphone boom. Mono/stereo compatible.

Headphones
- Frequency response: 45–15,000 Hz

Microphone
- Type: BKE 45-1 prepolarized condenser, noise-compensated
- Frequency response: 300–5,000 Hz (RTCA/DO-214)

FAA & JAA TSO C57a, C58a

Headsets for broadcast and communication solutions.

HMD 280 Professional

Professional headset for communications in high-noise environments. Its dynamic, super-cardioid microphone has been optimized for close talking distances.

Headphones
- Frequency response: 8–25,000 Hz (–10 dB/1 kHz)

Microphone
- Type: dynamic, super cardioid
- Frequency response: 50–13,500 Hz

HMD 281 Professional

Single-sided professional headset for talkback situations in film and TV applications. Its dynamic, super-cardioid microphone has been optimized for close talking distances.

Headphones
- Frequency response: 8–25,000 (Hz –10 dB/1 kHz)

Microphone
- Type: dynamic, super cardioid
- Frequency response: 50–13,500 Hz

NEW

HMD 26 Headset for broadcasting applications in noisy environments. Dynamic microphone with highly linear frequency response. Also available in monaural (HMD 26-600S) variant.

Headphones
- Frequency response: 20–18,000 Hz
- Nominal impedance: 50 Ω mono/100 Ω stereo or 300 Ω mono/600 Ω stereo

Microphone
- Type: BMD 424, dynamic, hyper-cardioid
- Frequency response: 40–16,000 Hz

NEW

HMD 26-600S Headset for broadcasting applications in noisy environments. Dynamic microphone with highly linear frequency response. Also available in binaural (HMD 26).

Headphones
- Frequency response: 20–18,000 Hz
- Nominal impedance: 600 Ω mono

Microphone
- Type: BMD 424, dynamic, hyper-cardioid
- Frequency response: 40–16,000 Hz

NEW

HMDC 26 Headset for broadcasting applications in extremely noisy environments. Equipped with NoiseGard active noise compensation. Dynamic microphone with highly linear frequency response.

Headphones
- Frequency response: 20–18,000 Hz
- Nominal impedance: 50 Ω mono/100 Ω stereo or 300 Ω mono/600 Ω stereo

Microphone
- Type: BMD 424, dynamic, hyper-cardioid
- Frequency response: 40–16,000 Hz

NEW

HME 26 Lightweight headsets for radio and television studios for particularly high sound pressure levels. The microphone features excellent acoustic performance, with linear frequency response and high feedback rejection. Also available as monaurale version (HME 26-600 S).

Headphone
- Frequency response: 20–14,000 Hz

Microphone
- Type: prepolarized condenser, noise-compensated
- Frequency response: 350–6,000 Hz (RTCA/DO-214)
- Available with various connectors, ETSO C57a & C58a, TSO C-139

NEW

HME 26-600S Lightweight headsets for radio and television studios for particularly high sound pressure levels.
The microphone features excellent acoustic performance, with linear frequency response and high feedback rejection. Also available as binaural version (HME 26).

Headphone
- Frequency response: 20–18,000 Hz
- Impedance: 600 Ω mono

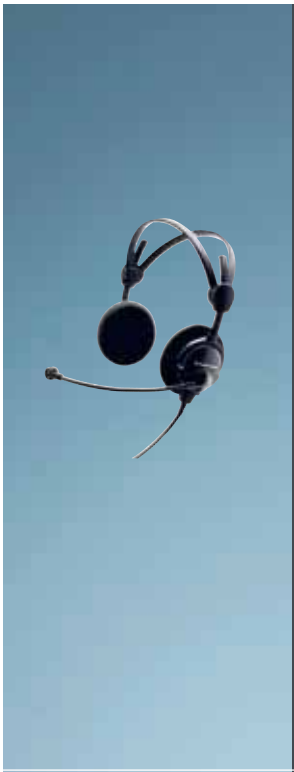
Microphone
- Type: BKE 4-2 pre-polarized condenser microphone, omni-directional
- Frequency response: 40 Hz–16,000 Hz

NEW

HME 26-4 Headset for broadcasting applications in noisy environments. The microphone offers broad frequency response for natural speech reproduction with excellent feedback rejection.

Headphones
- Frequency response: 20–18,000 Hz
- Nominal impedance: 50 Ω mono/100 Ω stereo or 300 Ω mono/600 Ω stereo

Microphone
- Type: BKE 4-4, pre-polarized condenser microphone, cardioid
- Frequency response: 40–20,000 Hz

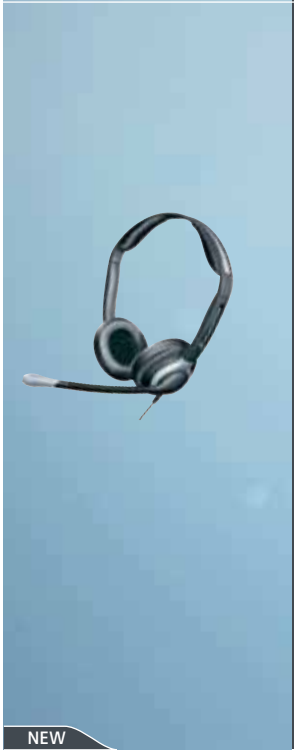


HMD 46 / HME 46

The HME 46 and HMD 46 series headsets are ideal for air traffic control. The headsets are equipped with ActiveGard™, which protects controllers from the effects of an acoustic burst.

Headphones
- Frequency response: 20–14,000 Hz
- Nominal impedance: 300 Ω

Microphone
- Type: BMD 46-413 dynamic (HMD 46) condensed or BKE 46 prepolarized condenser, noise-compensated (HME 46)
- Frequency response: 100–12,000 Hz (HMD 46) 100–15,000 Hz (HME 46)



NEW

HME 43-3 / HME 43-3S

Entry-level headsets for Air Traffic Control (ATC) in monaural and binaural designs.

Headphones
- Frequency response: 100–6,000 Hz
- Nominal impedance: 150 Ω mono/300 Ω stereo

Microphone
- Type: BKE 43 pre-polarized condenser microphone
- Frequency response: 400–4,500 Hz

Information Systems.
Tourguide 2020-D Unique Guided Tour System.

Designed so that a guide can speak at a normal conversational level and be heard and understood by an entire group – even in high-noise areas – Tourguide sytem 2020-D consists of a wireless microphone and any number of receivers, 20 receivers fit into the charging and carrying case EZL 2020-20 L. This hard shell case makes your system highly mobile. The system simply requires a certification by the manufacturer and no user licensing is required. This means that individual users will not have to register the equipment with the relevant national licensing authorities.

HDE 2020-D Makes sure that everyone will understand you: no longer will your audience have to carry any more equipment than is absolutely necessary. This truly unique device integrates both the receiver and headphones.

- Channels: 6 (selectable)
- Frequency range: 863–865 MHz (EU)
  926–928 MHz (US)

EK 2020-D Round off your Sennheiser Tourguide System with the sturdy and versatile bodypack receiver for tours, conference or assistive listening. It can be used with headphones or an induction neckloop for transmitting the sound to hearing aids equipped with a T coil.

- Channels: 6 (selectable)
- Frequency range: 863–865 MHz (EU) 926–928 MHz (US)

NEW

SK 2020-D Hands free: Combining a bodypack transmitter with an HS 2 headworn microphone, it will give you total freedom of movement during your tour. You will have both hands free to describe an object, make a presentation and express your point.

SK 2020-D
- Channels: 6 (selectable)
- Frequency range: 863–865 MHz (EU) 926–928 MHz (US)

HS 2-ew
- Nominal impedance: 1 Ω
- Frequency response: 20–20.000 Hz ± 3 dB

SKM 2020-D the easiest way to address your tour group is to speak into the hand-held microphone. If a participant has a question, just hand over the microphone so that the group can understand whatever needs to be explained. The transmitter is exceptionally durable and easy to operate.

- Channels: 6 (selectable)
- Frequency range: 863–865 MHz (EU) 926–928 MHz (US)

EZL 2020-20 L There is more inside: This charger case acts as both the storage case for all equipment and charging station for the TourGuide receivers and transmitter. Twenty charging bays for the receivers and two charging bays for the transmitter are provided.
The Copy button is another impressive feature of the charging case. Just press it once, and all the other receivers in the case are immediately set to the same selected channel.

Information Systems.
Tourguide 2020-D Stationary.

For conferences, theaters, boat or bus tours up to 8 channels may be provided for multi-language information. Hand-out, charging and storing of receivers has never been easier with the 19" rack mountable or table top charger for 40 receivers.

SR 2020-D half 19" rack mount transmitter features professional XLR-3 input. Audio sources providing line level or microphones, such as the ME 34, 35, 36 may be applied. 6 channels for combined application mobile/stationary or 8 channels for stationary applications can be set-up.

- Channels: 6 for mobile receivers
  8 for stationary use
- Frequency range: 863–865 MHz (EU)
  926–928 MHz (USA)

L 2021-40 charger has been specially designed for stationary applications. It holds up to 40 receivers that will automatically quick-charge to be ready for the next event. For instant channel configuration, the green Copy button sets all receivers to the same channel. The Ethernet interface of L 2021-40 allows networking of up to 125 chargers with up to 5000 receivers.

CC 2021 control software offers users and service staff easy channel set-up and monitoring. Up to 125 chargers can be controlled via Ethernet. Any number of receivers or chargers can be grouped and configured simultaneously on your PC.

Information Systems.
UHF Information System.

A professional UHF system for guided tours of cities, companies, exhibitions, etc. The guide chooses from a range of evolution wireless G3 transmitters, while the visitors listen via EK 1038 bodypack receivers. The system's modular architecture lets you tailor the system exactly to your needs.

EK 1038 Receiver

- Durable metal housing
- 16 channels (usable channels depend on local licensing regulations)
- UHF wideband
- Can be used with any Sennheiser headphones with a 3.5 mm jack plug
- Approx. 6 hrs of continuous operation

L 2015 Charging Unit

- Recharges two EK 1038
- Up to three L 2015 can be daisy-chained

evolution wireless G3 Transmitter

- For example, choice of handheld transmitter (SKM 300 G3) or bodypack transmitter (SK 300 G3) with headset microphone (ME 3)

Information Systems.
GuidePort.

GuidePort is a revolutionary new digital tourguide and information system for both indoor and outdoor use. Visitors can choose their own route through an exhibition or theme park and this system provides them with the audio information relevant to the area they are in or the exhibits they see.

GP EK 3202-4 The digital GuidePort RF wireless diversity receiver supplies the visitors of a theme park or exhibition with the selected audio program. It features four buttons for adjusting the volume and repeating or stopping the audio information. The receiver can store up to 20 hours of audio information and is fitted with an anti-theft feature. The anti-theft alarm is triggered by an identifier and produces a loud alarm sound of approx. 104 dB.

GP EK 3202-5 Like the GP EK 3202-4 but with the additional 'magnifier' key, which allows access to additional information.

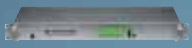
GP EK 3202-0 Like the GP EK 3202-4 but with an additional full numeric keypad that permits manual keying of specific locations or switching to alternate languages or levels.

GP SK 3202 The mobile transmitter together with a wireless microphone allow you to address visitors as a separate group, e.g. during guided tours of towns or plants or your exhibition. Other guidePORT users do not receive the transmission.

GP ID 3200 Identifier Installed near an exhibit, at a point of information at a theme park or near a video screen, the identifier auto-matically triggers audio information for visitors. The range and trigger mode can be chosen individually. The inconspicuous transmitter is available in both indoor (photo) and specially protected outdoor versions.

GP 03 M Open, single-sided clip-on headphone for the GuidePort receiver.

GP 03 Open, dynamic clip-on headphones for the GuidePort receiver.



GP SR 3200-2 Cell transmitter that stores the audio information that is transmitted to visitors. Pre-produced digital audio is stored as flash memory, while real time analog audio sources, such as films or live shows, are fed to the GP SR 3200-2 via configurable inputs.

GP L 3202-10 Charger unit for up to ten GuidePort receivers.

GuidePort Announcement Manager

The Announcement Manager handles any type of announcement at an exhibition or theme park. It is possible to exclusively address selected groups, languages or areas or to use this module as a service channel for the staff. The Manager handles both pre-recorded messages and spontaneous announcements recorded on the spot.

GuidePort Statistics Manager

The Statistics Manager allows the organizers of an exhibition or theme park to gather additional information about visitor behavior.

Conference and Discussion systems.
ADN – Audio Distribution Network.

A digital conference and discussion system network for the 21st century. Stylish with outstanding acoustic engineering and with impressively natural reproduction of the human voice. The system components with "Made in Germany" quality stand for unmatched stability and ease of use.

ADN D1 The digital delegate discussion unit is equipped with a high-quality Sennheiser microphone capsule which is designed to effectively suppress unwanted noise and feedback. Combined with twin loudspeakers in every unit the system reproduces human voice with clear speech intelligibility.

NEW

ADN C1 The chairperson variant of the discussion unit is additionally equipped with two control keys which allow the chairperson to mute and/or cancel delegate microphones. For the request-to-speak mode a special "Next"-button enables the chairperson to manually activate delegate microphones.

NEW

ADN CU1 The 19" rack-mountable central unit supports 30–40 discussion units depending on the used cable length. It also contains the "Conference Manager" software which allows the user to control and monitor all discussion unit via screen, laptop and mouse. Multi-language menus guarantee intuitive operation in many different countries.

NEW

WiCOS D The basic version of the WiCOS delegate unit for discussion features a detachable gooseneck microphone, built-in loudspeaker, two headphone sockets with individual volume settings and the prominent MIC key with status-LED. Power supply via Lithium-Ion battery pack.

WiCOS C The chairman unit for discussion administration features a detachable gooseneck microphone, built-in loudspeaker, two headphone sockets and the MIC key with status-LED. In addition WiCOS C offers two function keys, as well as two chairman keys. Power supply via Lithium-Ion battery pack.

WiCOS DV Delegate unit for conference with voting and interpretation. It features a detachable gooseneck microphone, built-in loudspeaker, two headphone sockets with individual volume settings, channel selection with two OLED displays and MIC key with LED. Three further keys are used for votings. Power supply via Lithium-Ion battery pack.

WiCOS CV Chairman unit for conference with voting and interpretaion. It features a detachable gooseneck microphone, built-in loudspeaker, two headhone sockets, channel selection and MIC key with LED. Two OLED displays for voting, volume or media control, three keys for voting and further two for chairman application. Power supply via Lithium-Ion battery pack.

WiCOS AP The stand-alone access point is the center of WiCOS and interface to SDC 8200. It features 3 antennas radiating within a radius of 30 meters in license-free frequency range of 2,4 GHz or 5 GHz. Three status LED, Ethernet connection for configuration and options for wall, tripod or table mounting.

WiCOS L-6 19" rack mountable charging tray for six WiCOS BA battery packs.

WiCOS Case This hard-top case with wheels and pull-out handhold offers space for twelve WiCOS delegate units and gooseneck microphones, one accesspoint and a separate accessory compartment for power supply units.

Conference Systems.
SDC 8200 Digital Conference and Interpretation System.

The premier conference solution that uses the benefits and performance of digital communication management. Extremely flexible and readily expandable, SDC 8200 is an ideal choice for any conference and interpretation application, from small conferences to large congresses.

SDC 8200 D The basic version of the SDC 8200 delegate unit features a gooseneck microphone, built-in loudspeaker, headphone socket, MIC key and LED status display. Three voting keys allowing electronic voting: Yes, Abstention, No. Also available as SDC 8200 C chairman's unit.

SDC 8200 DC This delegate unit has been designed for two users and features two separate headphone sockets with volume controls and channel selection keys for listening to different language channels. Three voting keys allowing electronic voting: Yes, Abstention, No. Also available as SDC 8200 CC chairman's unit.

SDC 8200 DV A delegate unit for one user, featuring five voting keys, a slot for the personal identification chip card, plus a graphical display unit for messages and voting result display. Also available as SDC 8200 CV chairman's unit.

SDC 8200 ID The interpreter unit has been designed according to international ISO standards. It comes with a headphone socket, volume and tone controls, display, A/B output channel selection and three relay-preset keys for selection of incoming languages. Alternatively, a headset can be used instead of the built-in goose-neck microphone.

SDC 8200 CU The heart of every system: The central unit powers and controls up to 120 delegate units. It features control functions and the connectors required for the delegate units, additional audio sources, monitoring headphones, interpretation management of up to 28 channels, camera control and cascading of multiple SDC 8200 CU's.

SDC 8200 CU-M

- For up to 50 delegate units
- Interpretation management for four channels

SDC 8200 AO This optional audio interface can be connected to the central unit, providing the floor language channel plus eight interpreted language channels for connecting recording equipment or infrared transmission systems.

SDC 8200 Software

Use the performance of SDC 8200 with the configuration and control software SDC 8200 SYS. The software makes it easy for conference managers to organize the speeches and contributions from participants throughout the hall. Depending on the license package selected, the following options are available:

- Microphone control with seating plan
- Microphone control via name list
- Participant database
- Voting module
- Agenda administration
- Graphic display of voting results
- Print-out of voting results via network slave PCs
- Chip card programming
- Text messaging
- Interpreter configuration
- Conference control via network slave PCs

SDC 8200 SYS

This configuration and control software lets you use the full performance of the SDC 8200 CU based conference and interpretation system. This software is a key tool for large conferences of up to 1024 participants where control and monitoring are of a special importance.

SDC 8200 SYS-M

This configuration and control software is speacially made for SDC 8200 CU-M and ideal for small and midsize conferences of up to 50 participants. It offers the same functionality with voting, database and agenda options as SDC 8200 SYS.

Neumann.Berlin
Microphones

They are regarded as classic studio microphones for vocal and instrumental recording, although their possible fields of application are much more extensive. Many Neumann models have become milestones in the history of audio technology.

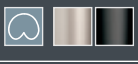
TLM 49 Studio microphone with a retro look. Warm sound, optimized for vocal recordings. The capsule is derived from that of the legendary U 47 and M 49. Set includes elastic suspension.

Neumann.Berlin
Large-Diaphragm Microphones.

"TLM" Series: The transformerless output circuitry ensures extremely high dynamic range, accurate handling of all frequencies and an output sufficient to drive even the longest cable runs. Like traditional transformers, it provides good common mode rejection, and prevents RF interference that could affect the balanced audio signal. "U" Series: The linear solid-state capsule amplification of a field effect transistor is combined with the classic character of a transformer-balanced output stage.

TLM 67 A contemporary development of the legendary U 67. The K 67 capsule and the new circuit design closely reproduce the U 67 sound characteristics. Three directional characteristics, pre-attenuation and low-cut filter. Unique Neumann dual-color design.

TLM 102 The TLM 102 defines a new generation of Neumann studio microphones. It is ideal for applications in home recording and broadcasting, especially for vocals (high speech intelligibility), acoustic guitars, percussion, drums and recording guitar amplifiers (high max. SPL).



TLM 103 The standard for home recording and the music industry. This mic is for anyone who, despite budget constraints, does not want to do without the true Neumann sound. Cardioid directional characteristic and very low self-noise. Also available as a studio set, including elastic suspension, and as a stereo set.

TLM 170 R The first Neumann mic with transformerless technology, featuring 5 directional characteristics, selectable at the mic or remotely. Pre-attenuation and low-cut filter. Transparent, natural sound quality. Excellent sound pressure handling makes this mic ideal for recording wind instruments, for example. Also available as a stereo set.

TLM 193 A large-diaphragm mic reduced to the essentials, with no compromise in quality. Neutral, transparent sound. Featuring a cardioid directional characteristic and a classic design. Includes swivel mount.

U 87 Ai The Neumann classic. It is the world's most widely used large-diaphragm condenser microphone. Three directional characteristics and switchable pre-attenuation ensure suitability for a wide range of applications. Also available as a stereo set in an aluminum case, incl. elastic suspensions.

U 89 i The 5 directional characteristics, two-level low-cut filter and switchable pre-attenuation provide maximum flexibility.

USM 69 i Compact switchable stereo microphone for MS and XY stereophony, with freely adjustable pickup angles and selectable directional characteristics.

Neumann.Berlin
Tube Microphones.

Neumann's modern approach to classic tube-amplified design combined with state-of-the-art transformerless output ensures extremely high dynamic range, accurate handling of all frequencies and an output sufficient to drive even the longest cable runs.

M 147 Tube Neumann tube sound with a cardioid directional characteristic and a classic design. The double-diaphragm capsule is derived from that of its legendary predecessors, the U 47 and M 49. Complete set in a high-quality aluminum case, including power supply, swivel mount and cables.

M 149 Tube Universal high-end tube microphone, nine directional characteristics, 7-position low-cut filter. The capsule is derived from that of the legendary U 47 and M 49. Complete set in a high-quality aluminum case, including power supply, elastic suspension and cables.

M 150 Tube A redesigned classic with new circuit technology and correspondingly low self-noise. Like the legendary M 50, it is ideal for orchestral recording. Complete set in a high-quality aluminum case, incl. power supply, elastic suspension and cables. Also available as a stereo set.

Legend of symbols on page 139

Neumann.Berlin
Digital Microphones.

With the Solution-D system, Neumann has now succeeded in bringing the dynamic range and signal fidelity of the best analog microphones into the digital realm. This means that, for the first time, the whole audio production chain is entirely digital.

TRUE NEUMANN SOUND:
The legendary Neumann sound in the digital realm for use with AES/EBU, S/PDIF or AES42 standards.

TRUE CONVERSION:
The guarantee of having one of the best A/D converters available.

TRUE TO THE ORIGINAL:
The satisfaction of recording the uncolored original, with no „bottlenecks" between the capsule and the recording system.

TYPICAL CONFIGURATIONS OF A DIGITAL SYSTEM:

KM D (nx) *

KM D (nx) *

D-01 *

XLR 3 Cable

* or any other AES42 compatible microphone
(e.g. Sennheiser MKH 8000 with MZD 8000)

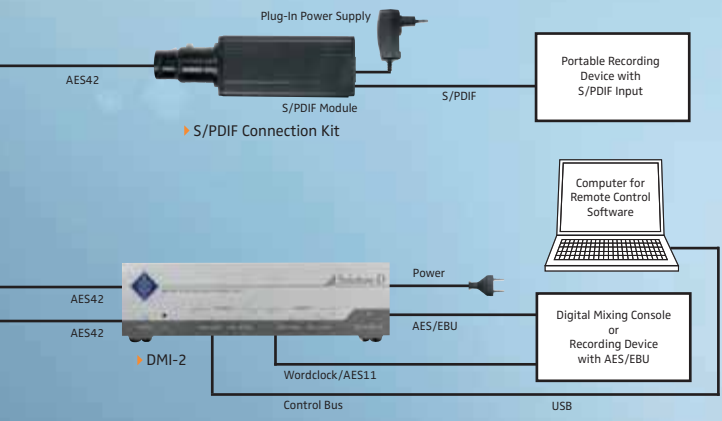
Pure Neumann sound in the digital domain. The signal is converted directly at the capsule via an exclusive Neumann A/D converter. Concerns about optimal preamps and A/D converters, level mismatches, signal bottlenecks, noise and harmonic distortion are things of the past.

Different types of interface are available: a) the DMI-2/DMI-8, RCS software-controlled, fully-featured, two-/eight-channel AES/EBU units, or b) a simple Connection Kit, connected directly to the microphone or in-line to the cable, which converts AES42 signals to either AES/EBU or S/PDIF, depending upon the model.

TRUE TIME SAVINGS:
Reduced time requirements and personnel costs, particularly due to faster post-production and shorter setup times for live concerts.

TRUE HANDLING SAFETY:
Anti-clipping processing ensures handling safety, and reduces stress in the studio and in live situations.

TRUE ECONOMY:
Lower investment costs, since separate A/D converters and preamps are no longer needed. This also means space and weight savings (e.g. in the OB van).

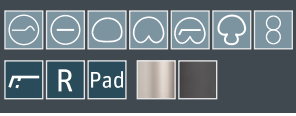


D-01 With its 15 different remotely controlled directional characteristics and numerous additional features, the D-01 can be optimally adapted to almost any recording situation. It has a newly developed capsule, and is valued by users particularly for its hitherto unknown transparency and fidelity to detail. Also available as a complete mono or stereo set in a high-quality aluminum case, including elastic suspension, DMI-2 interface, RCS software and all necessary cables.

KM D With the KM D microphones, the well-known, successful 180 miniature microphone series enters the digital domain. In the analog realm the KM 184 in particular is regarded as a standard for miniature condenser mics, and is one of the best-selling of all Neumann microphones. The KM D microphones have a modular construction, allowing the output stage to be combined with capsules having eight different directional characteristics. KM D Starter Sets include a KM 184 D in Nextel with clip, windscreen and a Connection Kit for AES/EBU or S/PDIF.

Miniature Microphone
[Passive Capsule Head* + Output Stage]
KK 183 + KM D = KM 183 D:
Omni, diffuse field equalized
KK 184 + KM D = KM 184 D: Cardioid
KK 185 + KM D = KM 185 D: Hypercardioid
KK 120 + KM D: Figure-8
KK 131 + KM D: Omni, free field equalized
KK 133** + KM D:
Omni, diffuse field equalized
KK 143 + KM D: Wide angle cardioid
KK 145 + KM D:
Cardioid with low frequency roll-off

* The KK... capsule heads can be used as well as with the analog KM A output stage.
** incl. SBK 133



TLM 103 D

The analog version of the TLM 103 D has for many years played a key role in ambitious project and home recording studios, and has made the Neumann sound available to a wider group of dedicated audio engineers and musicians. The TLM 103 D provides all of the sound features of its analog counterpart, as well as the advantages of completely digital circuit technology. TLM 103 D Starter Sets include the microphone in nickel, an elastic suspension and a Connection Kit.

DMI-2 / DMI-8 & RCS Software

The DMIs are two-/eight-channel devices which interface the AES42 data format supplied by the microphone into an AES/EBU signal. The DMIs are operated via the Neumann RCS remote control software. The RCS is installed on a PC or Mac, which is connected to the DMI via an USB port. If a large number of microphones is used, several DMIs can be cascaded. In addition to word clock input, the DMIs have an internal word clock generator. The DMI-8 offers several possibilities for an easy integration in audio networks.

Available soon:

– Portable 2-Channel-DMI
– MCA Multichannel Audio Interface to connect up to 8 DMI-8
– Ethersound plug-in module for DMI-8

Connection Kit AES / EBU or S / PDIF

The Connection Kits serve to supply power to digital microphones, which are in accordance with the AES42 standard. The microphone audio signal is made available at the Connection Kit output in S/PDIF or AES/EBU format, depending upon the model. The remote control and synchronization capabilities of the AES42 standard cannot be used with the Connection Kit.

Legend of symbols on page 139

Neumann.Berlin
Vocal Microphones.

The legendary Neumann sound takes to the stage! The high acoustic resolution and smooth frequency response of KMS microphones and KK capsules ensure that artists have ideal control of their stage performances at all times.

KMS 104* (plus) With a cardioid directional characteristic, the KMS 104 excels at suppressing sounds originating from 180° behind the microphone. The KMS 104 plus is optimized for female voices. Thick-walled, robust metal housing. Includes stand clamp and padded nylon bag.

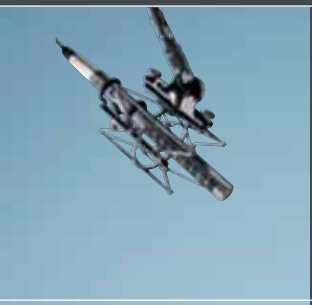
KMS 105* With a supercardioid directional characteristic, the KMS 105 provides very good suppression of sounds originating from the entire 180° hemisphere behind the microphone. Thick-walled, robust metal housing. Includes stand clamp and padded nylon bag.

KK 104 S The capsule head of the KMS 104 vocal microphone (cardioid), designed exclusively for use with the Sennheiser SKM 5200/5000 N wireless system, makes possible wireless Neumann sound on the stage. Padded nylon bag.

KK 105 S / KK 105 HD The capsule head of the KMS 105 vocal microphone (supercardioid), designed exclusively for use with the Sennheiser SKM 5200/5000 N wireless system, makes possible wireless Neumann sound on the stage. Padded nylon bag.

Neumann.Berlin
Shotgun Microphones.

Neumann shotgun mics provide a high level of directivity that remains within the acceptance angle, independently of the frequency. Thus the apparent tonal balance will not change when a sound source, such as an actor, moves within this area.



KMR 81 i* Short version of the classic shotgun mic, with switchable filter and pre-attenuation functions. Excellent off-axis (lateral and rear) attenuation. Free of coloration. Includes windscreen and leather carrying case.

KMR 82 i Long version of the classic shotgun mic, with switchable low-cut and high-cut filters. Excellent off-axis (lateral and rear) attenuation. Free of coloration. Includes windscreen and leather carrying case.

RSM 191 A Set A remotely controlled short shotgun system with adjustable pickup angle for MS and XY stereophony. The system consists of the microphone, matrix amplifier (which can be operated with batteries), output and adapter cables, windscreen and aluminum case.

* Digital version available soon.

Legend of symbols on page 139

Neumann.Berlin
Miniature Microphones.

Due to their streamlined construction and tendency toward neutral sound, miniature microphones are suited to a wide range of applications, from instrumental recording, to a great variety of stereo recording techniques, to unobtrusive use on television.

Series 180 Because of its optimized mechanical construction and conscious omission of modularity, the Series 180 is ideal for budget conscious production and home studios. The KM 184 (cardioid) has become the classic high-quality miniature microphone and the KM 183 and KM 185 are based on its design. Available individually and in attractive stereo sets.

KM 100 System / KM A

Modular miniature microphone systems for professional users. A comprehensive selection of accessories permits adaptation to a wide range of mounting, hanging and installation requirements.

KM 100: Active Capsule Head + Output Stage
KM 120: Figure-8
KM 130: Omni, diffuse field equalized
KM 131: Omni, free field equalized
KM 140: Cardioid
KM 143: Wide angle cardioid
KM 145: Cardioid, low frequency roll-off
KM 150: Hypercardioid

Pad

KM A: Passive Capsule Head* + Output Stage
KK 183 + KM A = KM 183 A: Omni, diffuse field equalized
KK 184 + KM A = KM 184 A: Cardioid
KK 185 + KM A = KM 185 A: Hypercardioid
KK 120 + KM A: Figure-8
KK 131 + KM A: Omni, free field equalized
KK 133** + KM A: Omni, diffuse field equalized
KK 143 + KM A: Wide angle cardioid
KK 145 + KM A: Cardioid with low frequency roll-off

Pad

NEW

Neumann.Berlin
Broadcast Microphones.

Emotion conveyed with technical perfection. This is the ideal which these microphones have been designed to achieve. Their character is assured via fine-tuning to the requirements of professional broadcast studios and the unique functionally-optimized design.

BCM 104 Broadcast microphone with a large-diaphragm condenser capsule, featuring integrated pop protection, suppression of structure-borne noise and a cardioid directional characteristic. Exchangeable BCK baskets with integrated identification rings promote hygiene in heavy usage environments.

BCM 705 The first Neumann microphone with a small-diaphragm dynamic capsule. Integrated pop protection, suppression of structure-borne noise, and a hypercardioid directional characteristic. Exchangeable BCK baskets with integrated identification rings promote hygiene in heavy usage environments.

* The KK... capsule heads can be used as well as with the digital KM D output stage.

** incl. SBK 133

Legend of symbols on page 139

Neumann.Berlin
Special Microphones.

While most Neumann microphones are designed for maximum flexibility, certain situations call for special tools. Neumann has developed a range of solutions that address specific problems.

GFM 132 The problem solver for special recording situations. The uniform frequency response for all angles of incidence, with an increase in the upper frequency range, ensures clarity and presence even when sound from distant sources is recorded. However, optimal results are also obtainable when the mic is located in the bass drum! Includes windscreen and cable.

TLM 50 Set A high-end microphone for top-quality recording, particularly in the classical realm. Excellent transmission down to the lowest frequencies. Omnidirectional characteristic, with special capsule mounting. Includes swivel mount cable and auditorium hanger.

KU 100 The KU 100 binaural dummy head transports the listener to the scene of the original performance, rather than bringing the acoustic event to the listener, as is the case with other stereo techniques. Includes output cable, adapter cable, power supply and aluminum case. Battery operation is possible.

Neumann.Berlin
Accessories.

Part of any good microphone program is a practical portfolio of accessories. Neumann offers a comprehensive range of accessories, facilitating use of the microphones in almost any conceivable situation.

Elastic Suspensions

Stands

Stereo Mounts

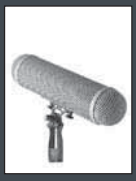
Stand Mounts

Goosenecks

Auditorium Hangers

Popscreens

Foam Windscreens


Windscreen Sets

Power Supplies

Connecting Cables

Adapter Cables

Directional Characteristics:

- Cardioid
- Figure-8
- Wide angle cardioid
- Hyper-/Supercardioid
- Lobe
- Omnidirectional
- Hemispherical
- Omni free field equalized
- Omni diffuse field equalized
- Cardioid, low frequency roll-off

Features:

- High-Cut Filter
- Low-Cut Filter
- Switchable Low-Cut Filter
- R Remote Controllable
- Pad Pad

Colors:

- Matte Black
- Nickel
- Black
- Nextel Black
- Nickel / Pearl Grey

Sennheiser Communications.
Unified Communications.

Our wireless headset solutions are optimized for wherever work occurs, whenever needed – in a crowded and noisy desk area, a home office or while traveling. Just connect to your communications devices. – Comfort calls.

DW Series DW Series (consisting of DW Office and DW Pro1/Pro2) is the premium DECT headsets for your desk phone and soft phone. The design especially focus on comfort and effectiveness, allowing you to move freely around without any wires to hold you back. With its long-distance wireless range, the DW Series headsets give you true comfort calls.

reddot design award winner 2010

iF product design award 2010

VMX Office

VMX Office is the perfect headset for the amodern, dynamic professional. Offering outstanding listening and wearing comfort, it can connect to desk phones, PCs and Bluetooth® mobile phones. VMX Office – the headset you can wear comfortably all day long.

Bluetooth

BW 900

Featuring Adaptive Intelligence™ for great speech recognition in any situation, the BW 900 is a premium wireless headset. This is a headset that automatically adapts to changing sound environments, remembering your preferred settings and delivering all-day listening comfort. It can connect to desk phones, Bluetooth® mobile phones and PCs.

Bluetooth

BW 900 Mobile Business Solution

Able to connect to all Bluetooth® mobile phones, the BW 900 Mobile Business Solution is ideal for dynamic, mobile professionals. It features Adaptive Intelligence™ for great speech recognition in any situation and all-day listening comfort.

Bluetooth

Sennheiser Communications.
Standard headsets.

Perfect for office- and call center staff, our headsets deliver your calls in clear sound quality, helping you to truly concentrate on your caller. All headsets are equipped with ActiveGard™ assuring you're always 100% protected from acoustic shock and sudden surges in volume, so you can talk in comfort as long as you like. – Comfort calls.

CC 550 The CC 550 is our top-of-the-line, binaural headset that delivers powerful, accurate sound to both ears for excellent speech comprehension. Its durable construction makes it perfect for any type of office or professional communication.

Also available as wideband version for connecting to your PC/softphone.

CC 540 The CC 540 is the headset for maximum productivity. The binaural headset delivers powerful, precise sound to both ears for excellent speech comprehension. Its durable construction makes it perfect for any type of office or professional communication.

CC 530 The CC 530 is an extremely robust monaural headset. It provides excellent sound and is very comfortable to wear. Its durable construction makes it perfect for any type of office or professional communication.

CC 520 The CC 520 is the headset for maximum productivity. The binaural headset delivers powerful, accurate sound to both ears for excellent speech comprehension. Its durable construction makes it perfect for any type of office or professional communication.

Also available as wideband version for connecting to your PC / softphone.

CC 515 The CC 515 is an extremely robust monaural headset with an extra-large ear cup that improves fit and comfort. The perfect headset to maximize work performance.

Also available as wideband version for connecting to your PC / softphone.

CC 510 The CC 510 is an extremely robust monaural headset. It provides excellent sound and is very comfortable to wear. Its durable construction makes it perfect for any type of office or professional communication.

SH 350 Featuring crystal-clear sound in both ears and a noise-canceling microphone, the SH 350 is the headset of choice for professionals.

Also available as wideband version for connecting to your PC/softphone.

SH 335 The SH 335 is a flexible headset that delivers comfort as well as great speech clarity thanks to its noise canceling microphone. Switch between ear-clip and headband to find the wearing style that best suits you.

SH 330 The SH 330 is a lightweight, all-purpose monaural headset ideal for longer conversations. Its noise-canceling microphone and superb sound make it ideal for users who value making their calls in comfort.

Also available as wideband version for connecting to your PC/softphone.

SH 300 The SH 300 is an all-purpose, ultra-lightweight monaural headset, ideal for longer conversations. If you value great comfort and superb speech definition in any professional situation, this stylish and high-quality headset is the one for you.

SH 250 SH 250 is a binaural, lightweigt headset which delivers high comfort and great speech clarity.

SH 230 SH 230 is a monaural, lightweight headset which delivers high comfort and great speech clarity.

Also available as wideband version for connecting to your PC/softphone.

Audioport, evolution, freePORT, HiDyn *plus*, HiDyn *stage*, Infoport, infraPORT, Mikroport, NoiseGard™, Open Aire, Sennheiser and Sennheiser Communications are trademarks of Sennheiser electronic GmbH & Co. KG.

ActiveGard™, Adaptive Intelligence™, FlexFit™ and VoiceMax™ are trademarks of Sennheiser Communications.

SRS (●) Headphone is a trademark of SRS Labs, Inc.

Neumann is a registered trademark of the Georg Neumann GmbH in certain countries.

The designs of some Neumann microphones are registered designs of the Georg Neumann GmbH in certain countries.

Solution-D is a registered trademark of Georg Neumann GmbH in certain countries.

The Bluetooth word mark and logos are owned by the Bluetooth SIG, Inc. and any use of such marks is under license.

iPhone and iPod are registered trademarks of Apple Inc., registered in the U.S. and other countries.

Omni-directional

Super-cardioid

Wide cardioid

Figure-of-eight

Cardioid

Lobar

Sennheiser electronic GmbH & Co. KG

Am Labor 1, 30900 Wedemark, Germany
www.sennheiser.com

076505 09/2010 Printed in Germany Sennheiser is a registered trademark of Sennheiser electronic GmbH & Co. KG www.sennheiser.com